

BUREAU OF AIR POLLUTION CONTROL

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

p: 775-687-9350 • <u>www.ndep.nv.gov/bapc</u> • f: 775-687-6396

Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

Section V. Specific Operating Conditions

A. Emission Unit #S2.001 – Pulverized Coal Fired Utility Boiler. UTM: North 4,091.219 km, East 746.849 km (Zone 11)

System 01 – Pulverized Coal-Fired Utility Boiler, 750 MW Output (Nominal)

S2.001 Super-Critical Steam Utility Boiler, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 6,048 million Btu/hr - Maximum Heat Input Rate.

1. NAC 445B.3405

Air Pollution Equipment

- a. Emissions from **S2.001** shall be ducted to the following emissions control system with 100% capture and a maximum volume flow rate of 1,823,619 actual cubic feet per minute (ACFM):
 - (1) Fabric Filter Baghouse for the control of particulate matter and lead.
 - (2) Wet scrubbing system for the control of sulfur dioxide, hydrogen fluoride and sulfuric acid mist.
 - (3) Selective Catalyst Reduction (SCR) system for the control of oxides of nitrogen (NO_x). The SCR shall utilize ammonia injection into the SCR at a volume needed to comply with the applicable NO_x emission limits.
 - (4) Low- NO_x burners and over-fire air shall be utilized to minimize the formation of NO_x during the combustion process.
 - (5) Halogenated Activated Carbon injection system shall be utilized for the control of mercury emissions, as required to meet permitted mercury emissions.

b. Stack Parameters

Height: 730.0 ft Diameter: 24.4 ft

Exhaust Temperature: 130 °F

Velocity: 65.0 ft/sec

Volume Flow: 1.823.619 ACFM

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.001**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.001**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of PM (particulate matter) filterable, to the atmosphere will not exceed **60.5** pounds per hour.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere will not exceed **181.4** pounds per hour.
 - (3) NAC 445B.2203(1)(c) The discharge of PM_{10} , filterable and condensable, to the atmosphere will not exceed **0.12** pound per million Btu.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM filterable, to the atmosphere will not exceed **0.01** pound per million Btu, based on a 3-hour averaging period.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM₁₀ filterable and condensable, to the atmosphere will not exceed **0.03** pound per million Btu, based on a 3-hour averaging period.



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- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (6) 40 CFR Part 60.42Da(c)(1) and (2) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases which contain filterable particulate matter in excess of either: 18 nanograms per Joule (ng/J) (0.14 lb/MWh) gross energy output; or 6.4 ng/J (0.015 lb per million Btu) heat input derived from the combustion of solid, liquid or gaseous fuel.
 - (7) NAC 445B.22047(3) The discharge of sulfur to the atmosphere will not exceed **3,628.8** pounds per hour, based on a one-hour average.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of SO₂ to the atmosphere will not exceed **0.06** pound per million Btu, based on a rolling 24-hour averaging period.
 - (9) NAC 445B.305 The discharge of SO₂ to the atmosphere will not exceed **483.8** pounds per hour, based on a rolling 3-hour averaging period.
 - (10) 40 CFR Part 60.43Da(i)(1) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test required to be conducted under Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain sulfur dioxide in excess of 180 ng/J (1.4 lb/MWh) gross energy output on a 30-day rolling average basis.
 - (11) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.06** pound per million Btu, based on a rolling 24-hour averaging period.
 - (12) NAC 445B.305 The discharge of NO_x to the atmosphere will not exceed **362.9** pounds per hour, based on a rolling 24-hour averaging period.
 - (13) 40 CFR Part 60.44Da(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test required to be conducted by Sec. 60.8 is completed, no new source owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction, reconstruction or modification commenced after February 28, 2005, any gases that contain nitrogen oxides (expressed as NO₂) in excess of 130 ng/J (1.0 lb MWh) gross energy output based on a 30-day rolling average basis.



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- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (14) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.10** pound per million Btu, based on a rolling 24-hour averaging period.
 - (15) NAC 445B.305 The discharge of CO to the atmosphere will not exceed **604.8** pounds per hour, based on a rolling 24-hour averaging period.
 - (16) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.003** pound per million Btu, based on a 3-hour averaging period.
 - (17) NAC 445B.305 The discharge of VOC to the atmosphere will not exceed **18.1** pounds per hour, based on a 3-hour averaging period.
 - (18) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of lead to the atmosphere will not exceed **0.00004** pound per million Btu, based on a 3-hour averaging period.
 - (19)NAC 445B.305 The discharge of lead to the atmosphere will not exceed **0.24** pound per hour, based on a 3-hour averaging period.
 - (20) 40 CFR Part 60.45Da(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date on which the initial performance test required to be conducted under §60.8 is completed, *the Permittee* shall not cause to be discharged into the atmosphere from **S2.001** any gases which contain mercury (Hg) emissions in excess of each Hg emissions limit in paragraphs (i) through (iii) below on a 12-month rolling averaging period.
 - (i) For each coal-fired electric utility steam generating unit that burns only bituminous coal, *the Permittee* must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of **20** x **10**⁻⁶ pound per megawatt hour (lb/MWh) or 0.020 lb/gigawatt-hour (GWh) on a gross output basis. The International System of Units (SI) equivalent is 0.0025 nanograms per joule (ng/J).
 - (ii) For each coal-fired electric utility steam generating unit that burns only sub-bituminous coal, if your unit is located in a county-level geographical area receiving less than or equal to 25 in/yr mean annual precipitation, based on the most recent publicly available U.S. Department of Agriculture 30-year data, *the Permittee* must not discharge into the atmosphere any gases from a new affected source which contain Hg in excess of **97 x 10⁻⁶** lb/MWh or 0.097 lb/GWh on an output basis. The SI equivalent is 0.0122 ng/J.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (20) 40 CFR Part 60.45Da(a) Federally Enforceable New Source Performance Standard Requirement (Continued)
 - (iii)For each coal-fired electric utility steam generating unit that burns a blend of coals from different coal ranks (i.e., bituminous coal, sub-bituminous coal), *the Permittee* must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the monthly unit-specific Hg emissions limit established according to paragraph A.2.a.(20)(iii)(a) or (iii)(b) below:
 - (a) The Permittee must not discharge into the atmosphere any gases from a new affected source that contain Hg in excess of the computed weighted Hg emissions limit based on the proportion of energy output (in British thermal units, Btu) contributed by each coal rank burned during the compliance period and its applicable Hg emissions limit in paragraphs A.2.a.(20)(i) and (ii) of this section as determined by Equation 1 of this section. The Permittee must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total Btu or megawatt hours contributed by all fuels burned during the compliance period.

Equation 1:
$$EL_b = \frac{\sum_{i=1}^{n} EL_i * HH_i}{\sum_{i=1}^{n} HH_i}$$

Where:

 $\mathbf{EL_b}$ is the total allowable Hg in lb/MWh that can be emitted to the atmosphere from any affected source being averaged under the blending provision.

EL_i is the Hg emissions limit for the subcategory i (coal rank) that applies to affected source, lb/MWh.

HH_i is the electricity output from **S2.001** during the production period related to use of the corresponding subcategory i (coal rank) that falls within the compliance period, gross MWh generated by **S2.001**.

 ${\bf n}$ is the number of subcategories (coal ranks) averaged for an affected source.

- (b) The Permittee must not discharge into the atmosphere any gases from the unit that contain Hg in excess of the computed weighted Hg emission limit based on the proportion of electricity output (in MWh) contributed by each coal rank burned during the compliance period and its applicable Hg emission limit in paragraphs A.2.a.(20)(i) and (ii) of this section as determined using Equation 1 of this section. The Permittee must meet the weighted Hg emissions limit calculated using Equation 1 of this section by calculating the unit emission rate based on the total Hg loading of the unit and the total megawatt hours contributed by both regulated and non-regulated fuels burned during the compliance period.
- (21) NAC 445B.305 The discharge of mercury to the atmosphere will not exceed 20×10^{-6} lb/MWh, on a gross output basis, based on a 12-month averaging period.



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- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (22)NAC 445B.305 <u>BACT Emission Limit</u> The discharge of fluorides (expressed as hydrogen fluoride) to the atmosphere will not exceed **0.00024** pound per million Btu, based on a 3-hour averaging period.
 - (23) NAC 445B.305 The discharge of hydrogen fluoride to the atmosphere will not exceed **1.45** pounds per hour, based on a 3-hour averaging period.
 - (24) NAC 445B.305 The discharge of hydrogen chloride to the atmosphere will not exceed **11.6** pounds per hour, based on a 3-hour averaging period.
 - (25) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of H₂SO₄ mist (sulfuric acid mist) to the atmosphere will not exceed **0.005** pound per million Btu, based on a 3-hour averaging period.
 - (26) NAC 445B.305 The discharge of sulfuric acid mist to the atmosphere will not exceed **30.2** pounds per hour, based on a 3-hour averaging period.
 - (27) NAC 445B.22017 The opacity from **S2.001** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b). **S2.001** is allowed one 6-minute period per hour of not more than 27 percent opacity as set forth in 40 CFR part 60.42Da(b).
 - (28) 40 CFR Part 60.42Da(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> On and after the date the particulate matter performance test required to be conducted by Sec. 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
 - (29) 40 CFR Part 60.48Da(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> The particulate matter emission standards under A.2.a.(6) of this section, the nitrogen oxides emission standards under A.2.a.(13) of this section and the Hg emission standards under A.2.a.(20) of this section apply at all times except during periods of startup, shutdown or malfunction.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. During all periods except startups or shutdowns, **S2.001** will combust coal only. Allowable coal types include subbituminous and Western bituminous coals. During startup or shutdown periods, **S2.001** may combust ultra low-sulfur distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight, either alone or in combination with coal.
- b. During normal operations (i.e., periods when startups, shutdowns or malfunctions do not occur), the maximum operating heat input rate for **S2.001** will not exceed **6,048** million Btu per any one-hour period. During startup periods when ultra low-sulfur distillate fuel, either alone or in combination with coal is combusted, the maximum operating heat input rate for **S2.001** will not exceed **2,434** million Btu per any one-hour period.
- c. **S2.001** may operate a total of 8,760 hours per calendar year.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

a. Compliance/Performance Testing

Within 180 days of initial startup or within 60 days of achieving the maximum rate of production at **S2.001**, whichever is sooner, and after 7,000 hours of additional operation following the initial testing, but not greater than 8,760 hours of additional operation after initial testing of **S2.001**, *the Permittee* shall:

- (1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.001** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch. Compliance with the particulate matter standards contained in A.2.a.(1) through (6) shall be determined by using the dry basis F factor (O₂) procedures in Method 19 to compute the emissions rate. Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of $160 \pm 14^{\circ}C$ ($320 \pm 25^{\circ}F$). For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O₂ concentration. The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points (40 CFR Part 60.50Da(b)). The daily coal sampling required in A.4.c.(3) of this section shall be performed during this test.
- (2) Conduct and record a Method 201A and 202 performance test for PM₁₀ on the exhaust stack of **S2.001** consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in A.4.a.(1) above. All particulate captured in the Method 5 test will be considered PM₁₀ for compliance demonstration purposes.
- (3) Conduct and record a Method 6 or 6C performance test for SO₂ on the exhaust stack of **S2.001** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6 or 6C
- (4) Conduct and record a Method 25 or 25A performance test for VOC on the exhaust stack of **\$2.001** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25 or 25A.
- (5) Conduct and record a Method 29 performance test for Pb on the exhaust stack of **S2.001** consisting of three valid runs. The Method 29 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 29.
- (6) Conduct and record a Method 26 performance test for HF and HCl on the exhaust stack of S2.001 consisting of three valid runs. The Method 26 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 26.
- (7) Conduct and record a Method 8 performance test, Controlled Condensate Procedure test, CAE Method 8A, or an alternative test method that has been prior-approved test for H₂SO₄ mist on the exhaust stack of **S2.001** consisting of three valid runs.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - a. Compliance/Performance Testing (continued)
 - (8) During the testing required in A.4.a.(1) of this section, Method 9 and the procedures in §60.11 shall be used to determine the opacity of the discharge from the exhaust stack of **S2.001**. The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined (40 CFR Part 60.50Da(b)(3)).
 - (9) The performance tests will be conducted at the maximum operating heat input rate limit established in A.3.b. of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. *The Permittee* shall make available to the director such records as may be necessary to determine the conditions of the test of performance. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a test of performance unless otherwise specified in the applicable standard (NAC 445B.252.3).
 - (10) *The Permittee* shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the performance test to allow the director to review the proposed testing procedures (NAC 445B.252.4). The alternative to the reference methods and procedures provided in 40 CFR Part 60.50Da(e) may be utilized to the extent that they are applicable to **S2.001**, and must be identified in the testing procedures as alternative methods.
 - (11) During each performance test required in A.4.a.(1) through (7) of this section, record the quantity (in tons) of coal combusted during each test run, the heat content value of the coal combusted during each test run (in Btu/ton) and include these data in the test results submitted. The emissions results of the Method 6 performance test for SO₂ must be converted to emissions of sulfur (both lb/hr and lb/MMBtu). The emissions results of the Method 5 or Method 201A and 202 performance test for PM₁₀ must be reported in lb/MMBtu.
 - (12) As a result of the most recent performance test performed in A.4.a.(1) and (2) of this section, derive emission factors for each of the following:
 - (i) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable and condensable.
 - (ii) Pounds of PM per ton of coal (lbs-PM/tons-coal), filterable only.
 - (iii) Pounds of PM₁₀ per ton of coal (lbs-PM₁₀/tons-coal), filterable and condensable.
 - (iv) Pounds of PM₁₀ per ton of coal (lbs-PM₁₀/tons-coal), filterable only.

These emissions factors will be based on the average of the 3 test runs.

(13) Within 60 days after completing the performance tests and opacity observations contained in A.4.a. of this section, *the Permittee* shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3791 (NAC 445B.252.8).



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - b. NSPS Subpart Da Compliance/Performance Testing

Within 60 days after achieving the maximum production rate at which **S2.001** will be operated, but not later than 180 days after initial startup of **S2.001**, *the Permittee* shall:

- (1) *The Permittee* will comply with the particulate matter standard in §60.42Da(c)(2) and shall demonstrate compliance with such standard according to the requirements in paragraphs (o)(1), (o)(2) and (o)(4) of 40 CFR Part §60.48Da. (§60.48Da(o), Compliance provisions; NSPS requirement). *The Permittee* shall:
 - (i) §60.48Da(o)(1) Conduct an initial performance test according to the requirements of §60.50Da to demonstrate compliance by the applicable date specified in §60.8(a) and thereafter, conduct the performance test **annually**, and
 - (ii) §60.48Da(o)(2) Use opacity monitoring equipment as an indicator of continuous particulate matter control device performance and demonstrate compliance with §60.42Da(b). In addition, baseline parameters shall be established as the highest hourly opacity averaged during the performance test. If any hourly average opacity measurement is more than 110 percent of the baseline level, the owner or operator will conduct another performance test within 60 days to demonstrate compliance. A new baseline is established during each stack test. The new baseline shall not exceed the opacity limit specified in §60.42Da(b), and
 - (iii) §60.48Da(o)(4) Install, calibrate, maintain and continuously operate a bag leak detection system according to paragraphs (i) through (viii) of §60.48Da(o)(4).
- (2) The Permittee shall determine compliance with the particulate matter standards in §60.42Da as follows:
 - (i) <u>§60.50Da(b)(1)</u> The dry basis F factor (O₂) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
 - (ii) §60.50Da(b)(2) For the particulate matter concentration, Method 5 shall be used.
 - (iii) $\underline{\$60.50\text{Da(b)(2)(i)}}$ The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (325 ± 25 °F).
 - (iv) §60.50Da(b)(2)(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling procedures of Method 3B shall be used to determine the O₂ concentration. The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of the sample O₂ concentrations at all traverse points.
 - (v) §60.50Da(b)(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.
 - (vi) §60.50Da(e) The Permittee may use the following as alternatives to the reference methods and procedures specified in this section:
 - (1) §60.50Da(e)(1) For Method 5 or 5B, Method 17 may be used if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of §§2.1 and 2.3 of Method 5B may not be used in Method 17.
 - (2) §60.50Da(e)(2) The Fc factor (CO₂) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of §60.46(d)(1). The CO₂ shall be determined in the same manner as the O₂ concentration.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (3) The Permittee shall determine compliance with the SO₂ standards in §60.43Da as follows:
 - (i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percent reduction option under §60.43Da is based on the average emission rates for sulfur dioxide and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
 - (ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percentage reduction option under §60.43Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and a new percent reduction for sulfur dioxide are calculated to show compliance with the applicable standards.
 - (iii) §60.48Da(g) The Permittee shall determine compliance with the SO₂ standards in §60.43Da as follows:
 - (1) <u>§60.48Da(g)(1)</u> Compliance with applicable 30-day rolling average SO₂ emission limitation is determined by calculating the arithmetic average of all hourly emission rates for SO₂ for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.
 - (2) $\underline{\$60.50Da(g)(2)}$ Compliance with applicable SO₂ percentage reduction requirements is determined based on the average inlet and outlet SO₂ emission rates for the 30 successive boiler operating days.
 - (iv) §60.48Da(m) *The Permittee* shall calculate SO₂ emissions by multiplying the average SO₂ output concentration, measured according to the provisions of §60.49Da(b), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).
 - (4) As applicable, *the Permittee* shall determine compliance with the SO_2 standards in §60.43Da as follows:
 - (i) $\underline{\$60.50Da(c)(1)}$ The percent of potential SO₂ emissions (%P_s) to the atmosphere shall be computed using the following equation:

$$%P_s = [(100 - %R_f) (100 - %R_g)] / 100$$

Where:

%**P**_s = percent of potential SO₂ emissions, percent.

 $% \mathbf{R_f} = \text{percent reduction from fuel pre-treatment, percent.}$

 $%\mathbf{R_g}$ = percent reduction by SO₂ control system, percent.

(ii) $\frac{\$60.50Da(c)(2)}{\$60.50Da(c)(2)}$ The procedures in Method 19 may be used to determine percent reduction (%R_f) of sulfur by such processes as fuel pre-treatment (physical coal cleaning, hydro-de-sulfurization of fuel oil, etc.), coal pulverizers and bottom and fly ash interaction. This determination is optional.



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CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (4) As applicable, the Permittee shall determine compliance with the SO₂ standards in §60.43Da as follows: (Continued)
 - (iii) §60.50Da(c)(3) The procedures in Method 19 shall be used to determine the SO₂ percent reduction (%R_g) of any SO₂ control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO₂ control device and the average SO₂ input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.
 - (iv) <u>\$60.50Da(c)(4)</u> The appropriate procedures in Method 19 shall be used to determine the emission rate of SO₂.
 - (v) §60.50Da(c)(5) The continuous monitoring system in §60.49Da(b) and (d) shall be used to determine the concentrations of SO₂ and CO₂ or O₂.
 - (5) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average SO₂ emission limitation under §60.43Da is determined by calculating the arithmetic average of all hourly emission rates for SO₂ for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.



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- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - o. NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (6) The Permittee shall determine compliance with the NO_x standards in §60.44Da as follows:
 - (i) §60.48Da(f) For the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitation under §60.44Da is based on the average emission rates for nitrogen oxides for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
 - (ii) §60.48Da(e) After the initial performance test required under §60.8, compliance with the nitrogen oxides emission limitations under §60.44Da is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for nitrogen oxides is calculated to show compliance with the applicable standards.
 - (iii) §60.48Da(g) The owner or operator of an affected facility subject to emission limitations in this subpart shall determine compliance as follows:
 - (1) $\underline{\$60.48Da(g)(1)}$ Compliance with applicable 30-day rolling average NO_x emission limitation is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown or emergency conditions.
 - (iv) §60.48Da(i) *The Permittee* shall calculate NO_x emissions by multiplying the average hourly NO_x output concentration, measured according to the provisions of §60.49Da(c), by the average hourly flow rate, measured according to the provisions of §60.49Da(l), and divided by the average hourly gross energy output, measured according to the provisions of §60.49Da(k).
 - (7) The Permittee shall determine compliance with the NO_x standards in §60.44Da as follows:
 - (i) $\underline{\$60.50Da(d)(1)}$ The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x .
 - (ii) $\underline{\$60.50Da(d)(2)}$ The continuous monitoring system in \$60.49Da(c) and (d) shall be used to determine the concentrations of NO_x and CO_2 or O_2 .
 - (8) Per 40 CFR §60.48Da(g)(1), compliance with the applicable 30-day rolling average NO_x emission limitation under §60.44Da is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown and malfunction.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- o. NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (9) The Permittee shall determine compliance with the Hg limit in §60.45Da according to the following procedures:
 - §60.50Da(h)(1) The initial performance test shall be commenced by the applicable date specified in §60.8(a). The required continuous monitoring systems must be certified prior to commencing the test. The performance test consists of collecting hourly Hg emission data (lb/MWh) with the continuous monitoring systems for 12 successive months of unit operation (excluding hours of unit startup, shutdown and malfunction). The average Hg emission rate is calculated for each month, and then the weighted, 12-month average Hg emission rate is calculated according to paragraph (h)(2) or (h)(3) of this section, as applicable. If, for any month in the initial performance test, the minimum data capture requirement in §60.49Da(p)(4)(i) is not met, the owner or operator shall report a substitute Hg emission rate for that month, as follows. For the first such month, the substitute monthly Hg emission rate shall be the arithmetic average of all valid hourly Hg emission rates recorded to date. For any subsequent month(s) with insufficient data capture, the substitute monthly Hg emission rate shall be the highest valid hourly Hg emission rate recorded to date. When the 12-month average Hg emission rate for the initial performance test is calculated, for each month in which there was insufficient data capture, the substitute monthly Hg emission rate shall be weighted according to the number of unit operating hours in that month. Following the initial performance test, the owner or operator shall demonstrate compliance by calculating the weighted average of all monthly Hg emission rates (in lb/MWh) for each 12 successive calendar months, excluding data obtained during startup, shutdown, or malfunction.
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average.
 - (1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section.
 - (A) §60.50Da(h)(2)(i)(A) If the Hg CEMS measures Hg concentration on a wet basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h$$

Where:

 E_h = Hg mass emissions for the hour, (lb)

K = Units conversion constant, 6.24×10^{-11} lb-scm/µgm-scf

 C_h = Hourly Hg concentration, wet basis, (µgm/scm)

 $\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

 $\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated. For example, $\mathbf{t_h}$ = 0.50 for a half-hour of unit operation and 1.00 for a full hour of operation.



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- b. NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (9) The Permittee shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)
 - (1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section. (Continued)
 - (B) §60.50Da(h)(2)(i)(B) If the Hg CEMS measures Hg concentration on a dry basis, use the equation below to calculate the Hg mass emissions for each valid hour:

$$E_h = K * C_h * Q_h * t_h * (1 - B_{ws})$$

Where:

 E_h = Hg mass emissions for the hour, (lb)

K = Units conversion constant, 6.24×10^{-11} lb-scm/ μ gm-scf

 C_h = Hourly Hg concentration, dry basis, (µgm/dscm)

 $\mathbf{Q_h}$ = Hourly stack gas volumetric flow rate, (scfh)

 $\mathbf{t_h}$ = Unit operating time, *i.e.*, the fraction of the hour for which the unit operated

 $\mathbf{B_{ws}} = \text{Stack}$ gas moisture content, expressed as a decimal fraction (e.g., for 8 percent H₂O, $\mathbf{B_{ws}} = 0.08$)



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- b. **NSPS Subpart Da Compliance/Performance Testing** (Continued)
 - (9) The Permittee shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)
 - (1) §60.50Da(h)(2)(i) Calculate the total mass of Hg emissions over a month (M), in pounds (lb), using either equation in A.4.b.(9)(ii)(1)(A) or (B) of this section, in conjunction with the equation in A.4.b.(9)(ii)(1)(C) of this section. (Continued)
 - (C) §60.50Da(h)(2)(i)(C) Use the equation below, to calculate M, the total mass of Hg emitted for the month, by summing the hourly masses derived in the equations in A.4.b.(9)(ii)(1)(A) or (B) of this section (as applicable):

$$M = \sum_{h=1}^{n} E_h$$

Where:

M = Total Hg mass emissions for the month, (lb)

 E_h = Hg mass emissions for hour "h", from A.4.b.(9)(ii)(1)(A) or (B)of this section, (lb)

- **n** = The number of unit operating hours in the month with valid CEM and electrical output data, excluding hours of unit startup, shutdown and malfunction
- (2) §60.50Da(h)(2)(ii) Calculate the monthly Hg emission rate on an output basis (lb/MWh) using the equation below.

$$ER = \frac{M}{P}$$

Where:

ER = Monthly Hg emission rate, (lb/MWh)

M = Total mass of Hg emissions for the month, (lb)

P = Total electrical output for the month, for the hours used to calculate M, (MWh)



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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- b. NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (9) The Permittee shall determine compliance with the Hg limit in §60.45Da according to the following procedures: (Cont.)
 - (ii) §60.50Da(h)(2) Follow the procedures below to determine the Hg 12-month rolling average. (Continued)
 - (3) §60.50Da(h)(2)(iii) Until 12 monthly Hg emission rates have been accumulated, calculate and report only the monthly averages. Then, for each subsequent calendar month, use the equation below to calculate the 12-month rolling average as a weighted average of the Hg emission rate for the current month and the Hg emission rates for the previous 11 months, with one exception. Calendar months in which the unit does not operate (zero unit operating hours) shall not be included in the 12-month rolling average.

$$E_{avg} = \frac{\sum_{i=1}^{12} (ER)_i * n_i}{\sum_{i=1}^{12} n_i}$$

Where:

 E_{avg} = Weighted 12-month rolling average Hg emission rate, (lb/MWh)

(ER)_i = Monthly Hg emission rate, for month "i", (lb/MWh)

- **n** = The number of unit operating hours in month "i" with valid CEM and electrical output data, excluding hours of unit startup, shutdown, and malfunction
- (iii) §60.50Da(h)(3) If a sorbent trap monitoring system is used in lieu of a Hg CEMS, as described in §75.15 of this chapter and in appendix K to Part 75 of this chapter, calculate the monthly Hg emission rates using the equations in A.4.b.(9)(ii)(1)(B) through A.4.b.(9)(ii)(2) of this section, except that for a particular pair of sorbent traps, C_h in the equation in A.4.b.(9)(ii)(1)(B) shall be the flow-proportional average Hg concentration measured over the data collection period.
- (iv) §60.50Da(i) Daily calibration drift (CD) tests and quarterly accuracy determinations shall be performed for Hg CEMS in accordance with Procedure 1 of Appendix F to this Part. For the CD assessments, you may either use elemental mercury or mercuric chloride (Hg° or HgCl₂) standards. The four quarterly accuracy determinations shall consist of one relative accuracy test audit (RATA) and three measurement error (ME) tests using HgCl₂ standards, as described in section 8.3 of Performance Specification 12-A in Appendix B to this Part (note: Hg° standards may be used if the Hg monitor does not have a converter). Alternatively, the owner or operator may implement the applicable daily, weekly, quarterly and annual quality assurance (QA) requirements for Hg CEMS in Appendix B to Part 75 of this chapter, in lieu of the QA procedures in Appendices B and F to this Part. Annual RATA of sorbent trap monitoring systems shall be performed in accordance with Appendices A and B to Part 75 of this chapter, and all other quality assurance requirements specified in Appendix K to Part 75 of this chapter shall be met for sorbent trap monitoring systems.



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- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - b. NSPS Subpart Da Compliance/Performance Testing (Continued)
 - (10) §60.48Da(1) *The Permittee* shall calculate the Hg emission rate (lb/MWh) for each calendar month of the year, using hourly Hg concentrations measured according to the provisions of §60.49Da(p) in conjunction with hourly stack gas volumetric flow rates measured according to the provisions of §60.49Da(l) or (m), and hourly gross electrical outputs, determined according to the provisions in §60.49Da(k). Compliance with the applicable standard under §60.49Da is determined on a 12-month rolling average basis.
 - (11) *The Permittee* shall determine compliance with the opacity standard in 40 CFR §60.42Da(b) via continuous opacity monitoring in accordance with A.4.c.(16) and (17) of this section.



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CLASS I AIR QUALITY

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

c. Monitoring

The Permittee, upon startup of S2.001, will:

- (1) Install, calibrate, operate and maintain mass measurement devices to continuously measure the amount of fuel combusted in **S2.001**. The mass measurement devices must be installed at appropriate locations in the fuel delivery system to accurately and continuously measure the following listed fuels combusted in **S2.001**:
 - (i) Coal (in tons)
 - (ii) Distillate Fuel (in gallons)
- (2) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the quantities of fuel as measured by the fuel mass measurement devices required in A.4.c.(1) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications.
- (3) Perform coal sampling of the coal prior to it entering the boiler. Sampling shall be conducted for moisture, ash, sulfur content and gross calorific value. Coal moisture, ash, sulfur content and gross calorific value will be recorded on 24-hour and 30-day rolling averaging periods. A coal analysis shall be performed daily and the results of these analyses shall be retained for at least two years following the date of the measurement. All sample collection, sample preparation, and analyses performed or caused to be performed shall be conducted according to the methods specified in A.4.c.(4) of this section and in accordance with the coal sampling and analysis plan prepared by Toquop Energy LLC and approved by the BAPC under A.4.c.(4) of this section.
- (4) Perform coal sampling as required in A.4.c.(3) of this section according to Section 12.5.3.2.2 in Method 19 in Appendix A to Part 60 and the appropriate ASTM method. The appropriate ASTM methods will be used to determine the coal moisture, ash and sulfur contents. At least 90 days prior to startup of **S2.001**, *the Permittee* shall submit a coal sampling and analysis plan to the Nevada Bureau of Air Pollution Control (BAPC), detailing the procedures and equipment that will be used to obtain samples and analyze the coal, including the appropriate ASTM test methods that will be used for each parameter. The BAPC will review the coal sampling and analysis plan and approve the plan or request additional information within 30 days of receipt of the plan.



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CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - c. Monitoring (continued)
 - (5) Install, calibrate, operate and maintain a SO₂ continuous emissions monitor system (CEMS) (consisting of a SO₂ pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(22) of this section) to continuously measure the concentration of SO₂ (in ppm), percent reduction and SO₂ emission rate (in lb/hr, lb/MMBtu and lb/MWh) from S2.001. The CEMS will be installed at an appropriate location in the exhaust stack of S2.001 to accurately and continuously measure the SO₂ concentrations in S2.001 in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(b), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (6) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the SO₂ concentration (in ppm) and SO₂ emission rate (in lb/hr, lb/MMBtu and lb/MWh), as measured by the CEMS required in A.4.c.(5) of this section, on a 1-hour, 3-hour, 24-hour and 30-day periods. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da, 40 CFR Part 60, Appendix B, Performance Specifications, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (7) Divide the results of the 1-hour average for SO₂ emissions (in lb/hr), recorded in A.4.c.(6) of this section, by 2 to obtain the average Sulfur emissions in lb/hour.



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting

- c. Monitoring (continued)
 - (8) Install, calibrate, operate and maintain a NO_x continuous emissions monitor system (CEMS) (consisting of a NO_x pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(22) of this section) to continuously measure the concentration of NO_x (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh) from S2.001. The CEMS will be installed at an appropriate location in the exhaust stack of S2.001 to accurately and continuously measure the NO_x concentration in S2.001 in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(c), 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F. If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of \$60.49Da(c), except that the owner or operator shall also meet the requirements of \$60.51Da. Data reported to meet the requirements of \$60.51Da shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter. The procedures established in 40 CFR Part 60.49Da(i) shall be used to conduct monitoring system performance evaluations.
 - (9) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the NO_x concentration (in ppm) and NO_x emissions rate (in lb/MMBtu and lb/MWh), as measured by the CEMS required in A.4.c.(8) of this section, on a 24-hour, 30-day and 12-month rolling period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60, Appendix B, Performance Specification 2, 40 CFR Part 75, Part 75.11, 40 CFR Part 75 Subpart B; and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (10) Install, calibrate, operate and maintain a continuous monitoring system for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. (40 CFR Part 60.49Da(d))
 - (11) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored (40 CFR Part 60.49Da(d)). The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267.
 - (12)Operate the continuous monitoring systems for NO_x, SO₂ and oxygen or carbon dioxide and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR Part 60.49Da(e))



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - c. Monitoring (continued)
 - (13) Obtain emission data from the continuous emission monitoring systems for NO_x , SO_2 and oxygen or carbon dioxide for at least 90 percent of all operating hours for each 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph $\S60.49Da(h)$. (40 CFR Part 60.49Da(f)(2))
 - (14)Use methods and procedures in §60.49Da(i) to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d) for the continuous emission monitoring systems for NO_x, SO₂ and oxygen or carbon dioxide. Acceptable alternative methods and procedures are given in §60.49Da(j). (40 CFR Part 60.49Da(i))
 - (15) Install, calibrate, operate and maintain a continuous opacity monitoring system to continuously measure and record the opacity discharged from **S2.001**. The continuous opacity monitoring system will be installed at an appropriate location in the discharge stack of **S2.001** to accurately and continuously measure the opacity of **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, and 40 CFR Part 75.10. If opacity interference due to water droplets exists in the stack, the opacity is monitored upstream of the interference.
 - (16) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the opacity (in percent opacity) as measured by the continuous opacity monitoring system required in A.4.c.(15) of this section on a 6-minute average period. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(a), 40 CFR Part 60, Appendix B, Performance Specification 1, 40 CFR Part 75.10 and 40 CFR Part 75.14.
 - (17) Install, calibrate, operate and maintain a CO continuous emissions monitor system (CEMS) (consisting of a CO pollutant concentration monitor in conjunction with the flow monitoring device required in A.4.c.(22) of this section) to continuously measure the concentration of CO (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu) from **S2.001**, on a rolling 24-hour averaging period. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** to accurately and continuously measure the CO concentration in **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (18) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the CO concentration (in ppm) and CO emissions rate (in lb/hr and lb/MMBtu), as measured by the CEMS required in A.4.c.(17) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 4 and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.



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CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting
 - c. Monitoring (continued)
 - (19) The owner or operator of an affected facility demonstrating compliance with an Hg limit in §60.45Da shall install and operate a Continuous Emissions Monitoring System (CEMS) to measure and record the concentration of Hg in the exhaust gases from each stack. The CEMS will be installed at an appropriate location in the exhaust stack of **S2.001** to accurately and continuously measure the Hg concentration in **S2.001** in accordance with the requirements prescribed in NAC 445B.256 to NAC 445B.267, 40 CFR Part 60.49Da(p) and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (20) Install, calibrate, operate and maintain a Continuous Data Collection System (CDCS) to continuously record the Hg concentration (in ppm) and Hg emissions rate (in lb/MWh on an annual basis), as measured by the CEMS required in A.4.c.(19) of this section. The CDCS will be installed, calibrated, operated and maintained in accordance with the manufacturer's specifications and the requirements prescribed in NAC 445B.256 to NAC 445B.267 and 40 CFR Part 60, Appendix B, Performance Specification 12A and the requirements for the annual Relative Accuracy Test Audit, as prescribed in 40 CFR Part 60, Appendix F.
 - (21) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor. (40 CFR § 60.49Da(k)).
 - (22) Install, certify, operate and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and procedure 1 of Appendix F of 40 CFR Part 60, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere in accordance with 40 CFR§ 60.49Da(1). Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR §75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR §75.21, and validated according to 40 CFR §75.23, may be used. (40 CFR § 60.49Da(m)).
 - (23) All conversions from Btu/hr unit input to MW unit output must use equivalents found in 40 CFR 60.40(a)(1) for electric utilities. (40 CFR §60.50Da(g)(1)).
 - (24) Operate the continuous monitoring systems required under 40 CFR Part 60, Subpart Da and record data during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments. (40 CFR §60.49Da(e))



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405

Compliance, Monitoring, Recordkeeping and Reporting (continued)

d. **Recordkeeping**

The Permittee will maintain a contemporaneous log containing at a minimum, the following recordkeeping for each day, or part of a day that **S2.001** is operating:

- (1) The total hourly quantity of:
 - i. Coal (in tons) combusted, for each hour of operation based on the data recorded by the CDCS as required in A.4.c.(2) of this section.
 - ii. Distillate fuel (in gallons) combusted, for each hour of operation based on the data recorded by the CDCS as required in A.4.c.(2) of this section.
- (2) Daily hours of operation:
 - i. The total daily hours of operation for the corresponding date.
- (3) The moisture, ash and sulfur content of the coal, as required in A.4.c.(3) of this section. The average heat content of the coal, in Btu/ton, combusted for the corresponding date. The heat content of the coal will be based on the gross calorific value determined in A.4.c.(3) of this section. The average heat content of the distillate fuel will be assumed equal to 137,000 Btu/gallon.
- (4) The average hourly heat input of the coal and/or distillate fuel in MMBtu per hour. The hourly heat inputs will be calculated from the hourly fuel usage rates recorded in A.4.d.(1) of this section, and the heat content of the fuel as recorded in A.4.d.(3) of this section.

 $Sample\ Calculation: \\ (tons-coal/hr)(Btu/ton-coal) = Btu/hr\ or\ MMBtu/hr\\ or\\ (gallons\ of\ distillate\ fuel/hr)(Btu/gallons) = Btu/hr\ or\ MMBtu/hr\\$

- (5) The hourly emission rate of PM and PM_{10} each:
 - (i) In pounds per MMBtu (lbs/MMBtu). The hourly emission rates will be calculated from the heat content of the fuel determined in A.4.d.(3) of this section, and the emission factor derived in A.4.a.(12) of this section.

 $Sample\ Calculation: \\ (tons-coal/Btu)(lb/tons-coal) = lbs-PM/Btu\ or\ lbs-PM/MMBtu\\ (tons-coal/Btu)(lb/tons-coal) = lbs-PM_{10}/Btu\ or\ lbs-PM_{10}/MMBtu\\ \end{cases}$

(ii) In pounds per hour (lbs/hr). The hourly emission rates will be calculated from the hourly tonnage of coal combusted, as determined in A.4.d.(1) of this section, and the emission factor derived in A.4.a.(12) of this section.

Sample Calculation: (tons-coal/hour)(lb/tons-coal) = lbs-PM/hr (tons-coal/hr)(lb/tons-coal) = lbs-PM₁₀/Btu



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

- A. Emission Unit #S2.001 Pulverized Coal Fired Utility Boiler (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting (continued)
 - d. Recordkeeping (continued)
 - (6) The emission rates of sulfur and SO₂ each, in pounds per hour (lbs/hr) and pounds per million Btu (lbs/MMBtu) measured by the CEMS required in A.4.c.(5) of this section; and the "as fired" fuel monitoring required in A.4.c.(1) of this section, for each averaging period described below:
 - (i) The sulfur emissions in pounds per hour (lbs/hr) for each 1-hour period. Sulfur emissions will be one-half of the SO₂ emissions measured.
 - (ii) The Sulfur and SO₂ emissions in pounds per million Btu (lbs/MMBtu).

The compliance determination procedures established in 40 CFR Part 60.50Da(c) will be used to convert the continuous monitoring data into units of the applicable standards (lb/MMBtu and lb/hr, 3-hour, 24-hour and 30-day rolling average periods and percent reduction).

- (7) The hourly emissions rate of NO_x in pounds per million Btu (lbs/MMBtu) for each 30-day rolling averaging period measured by the CEMS required in A.4.c.(8) of this section. The compliance determination procedures established in 40 CFR Part 60.50Da(d) will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, 24-hour, 30-day, annual rolling average periods).
- (8) The recorded opacity (in percent opacity) from the continuous opacity CDCS system required in A.4.c.(16) of this section. The opacity will be determined from reducing all data from the successive 10-second readings and recorded for the following:
 - (i). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in NAC 445B.22017.1(b) and as set forth in 40 CFR Part 60.13(h).
 - (ii). Each 6-minute average, except for one 6-minute period per hour of up to 27 percent opacity as established in 40 CFR Part 60.42Da(b).
- (9) The emissions rate of CO in pounds per million Btu (lbs/MMBtu) and pounds per hour (lbs/hr) recorded by the CDCS required in A.4.c.(18) of this section. The compliance determination procedures established in 40 CFR Part 60.48Da will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MMBtu, lb/hr and 24-hour rolling average periods).
- (10) The emissions rate of Hg in pounds per Megawatt-hour (lbs/MWh) recorded by the CDCS required in A.4.c.(20) of this section. The compliance determination procedures established in 40 CFR Part 60.45Da will be used to convert the continuous monitoring data into units of the applicable standard (e.g., lb/MWh).
- (11) New Source Performance Standards (NSPS) Notification and Record Keeping (40 CFR Part 60.7(b)) Permittee, upon the issuance date of this permit shall:
 - (1) Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.



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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

Section V. Specific Operating Conditions

B. Emission Unit #S2.002 – Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler. UTM: North 4,091.331 km, East 746.643 km (Zone 11)

System 02 - Ultra Low Sulfur Distillate Fuel -Fired Auxiliary Boiler #1

S2.002 Auxiliary Boiler, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 86.4 million Btu/hr - Maximum Heat Input Rate

1. NAC 445B.3405

Air Pollution Equipment

- a. Emissions from S2.002 shall be controlled by the following combustion practices. The following control technologies shall be utilized to minimize the formation of NO_x during the combustion process:
 - (1) Low NO_x Burner.
 - (2) Flue Gas Recirculation.
- b. Stack Parameters

Height: 98.0 ft Diameter: 2.92 ft

Stack Temperature: 284 °F Velocity: 82.0 ft/sec

Volume Flow: 33,038 ACFM

2. NAC 445B.3405

Emission Limits

- On and after the date of startup of **S2.002**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.002**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of PM (particulate matter) filterable, to the atmosphere will not exceed **1.51** pounds per hour, based on a 3-hour averaging period. The discharge of PM₁₀ (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere will not exceed **2.08** pounds per hour, based on a 3-hour averaging period.
 - (2) NAC 445B.2203 The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.36** pound per million Btu, based on a 3-hour averaging period.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM filterable, to the atmosphere will not exceed **0.018** pound per million Btu, based on a 3-hour averaging period. The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.024** pound per million Btu, based on a 3-hour averaging period.



BUREAU OF AIR POLLUTION CONTROL

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- B. Emission Unit #S2.002 (continued)
 - 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (4) NAC 445B.305 The discharge of SO₂ (sulfur dioxide) to the atmosphere will not exceed **0.14** pound per hour, based on a 3-hour averaging period.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of SO₂ to the atmosphere will not exceed **0.002** pound per million Btu, based on a 3-hour averaging period.
 - (6) NAC 445B.22047(3) The discharge of sulfur to the atmosphere will not exceed **60.48** pounds per hour, based on a 3-hour averaging period.
 - (7) NAC 445B.305 The discharge of NO_x to the atmosphere will not exceed **8.64** pounds per hour, based on a 3-hour averaging period.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.1** pound per million Btu, based on a 3-hour averaging period.
 - (9) NAC 445B.305 The discharge of CO to the atmosphere will not exceed **3.15** pounds per hour, based on a 3-hour averaging period.
 - (10) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.036** pound per million Btu, based on a 3-hour averaging period.
 - (11) NAC 445B.305 The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.21** pound per hour, based on a 3-hour averaging period.
 - (12) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of VOC to the atmosphere will not exceed **0.003** pound per million Btu, based on a 3-hour averaging period.
 - (13) NAC 445B.305 The discharge of sulfuric acid mist to the atmosphere will not exceed **0.0029** pound per hour, based on a 3-hour averaging period.
 - (14) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of H₂SO₄ (sulfuric acid mist) to the atmosphere will not exceed **0.0004** pound per million Btu, based on a 3-hour averaging period.
 - (15)NAC 445B.22017 The opacity from **S2.002** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b).



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
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Section V. Specific Operating Conditions (continued)

- B. Emission Unit #S2.002 (continued)
 - 2. NAC 445B.3405

Emission Limits (continued)

- b. Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirements.
 - (1) 40 CFR Part 63.52(b)(1) When one or more sources in a category or subcategory subject to the requirements of 40 CFR Part 63.52 are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke section 112(g) of the Clean Air Act requirements, *The Permittee* must submit an application meeting the requirements of 40 CFR Part 63.53(a) within 30 days of startup of the source.



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- B. Emission Unit #S2.002 (continued)
 - 3. NAC 445B.3405
 - **Operating Parameters**
 - a. **S2.002** will only combust distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight.
 - b. S2.002 will not operate more than 550.0 hours per year, based on a 12-month rolling period.
 - c. The maximum operating heat input rate for S2.002 will not exceed 86.4 million Btu per any one-hour period.
 - d. The maximum allowable distillate fuel consumption rate for \$2.002 will not exceed 631.0 gallons per hour.



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
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Section V. Specific Operating Conditions (continued)

- B. Emission Unit #S2.002 (continued)
 - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Monitoring and Record keeping

- a. The Permittee, upon issuance of this operating permit will:
 - (1) Monitor and record the total consumption of distillate fuel for **S2.002** on a daily basis, for each day or part of a day that **S2.002** is operating.
 - (2) Monitor and record the hours of operation for **S2.002** on a daily basis, for each day or part of a day that **S2.002** is operating.
 - (3) Conduct and record a visible emission inspection on the exhaust stack of **\$2.002**, for each day, or part of a day that **\$2.002** is operating; record the time of the survey and indicate whether any visible emission was observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.002** is operating:
 - (i) The calendar date of any required monitoring.
 - (ii) The total daily hours of operation for the corresponding date.
 - (iii) The total daily fuel consumption rate of distillate fuel, in gallons, for the corresponding date.
 - (iv) The corresponding average hourly fuel consumption rate of distillate fuel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (ii) and (iii) above.
 - (v) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

- B. Emission Unit #S2.002 (continued)
 - 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
 - b. Compliance/Performance Testing

Within 100.0 operating hours of the notification of initial startup of S2.002, as required in Section II.A.3, the Permittee shall:

- (1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.002** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch.
- (2) Conduct and record a Method 201A and 202 performance test for PM₁₀ on the exhaust stack of S2.002 consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in B.4.b.(1) above. All particulate captured in the Method 5 test will be considered PM₁₀ for compliance demonstration purposes. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).
- (3) Conduct and record a Method 7E performance test for NO_x on the exhaust stack of **S2.002** consisting of three valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 7E.
- (4) Conduct and record a Method 10 performance test for CO on the exhaust stack of **S2.002** consisting of three valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 10.
- (5) Conduct and record a Method 25 performance test for VOC on the exhaust stack of **S2.002** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25.
- (6) Conduct and record a Method 6 performance test for SO₂ on the exhaust stack of **S2.002** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6. To determine the sulfur emission rate, *the Permittee* shall divide the SO₂ emission rate by 2.
- (7) Conduct and record Method 8A performance test for H₂SO₄ mist on the exhaust stack of **S2.002** consisting of three valid runs. The Method 8A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 8A.
- (8) During one of the three test runs required in B.4.b.(1) or (2) of this section, conduct and record a Method 9 visual opacity observation of the discharge from the exhaust stack of **S2.002**. The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.



BUREAU OF AIR POLLUTION CONTROL

901 SOUTH STEWART STREET SUITE 4001 CARSON CITY, NEVADA 89701-5249

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

- B. Emission Unit #S2.002 (continued)
 - 4. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Compliance, Monitoring, Recordkeeping and Reporting (continued)
 - b. **Compliance/Performance Testing** (Continued)
 - (9) The performance tests will be conducted at the maximum operating heat input rate limit established in B.3.c of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. *The Permittee* shall make available to the director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard (NAC 445B.252.3).
 - (10) *The Permittee* shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures (NAC 445B.252.4). Alternatives to the reference methods and procedures provided in B.4.b. of this section may be utilized to the extent that they are applicable to **S2.002**, and must be identified in the testing procedures as alternative methods.
 - (11) During each performance test required in B.4.b.(1) through (7) of this section, record the quantity (in gallons) of distillate fuel combusted during each test run, the heat content value of the distillate fuel combusted during each test run (in Btu/gallon) and include these data in the test results submitted.
 - (12) Within 60 days after completing the performance tests and opacity observations contained in B.4.b. of this section, *the Permittee* shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3791 (NAC 445B.252.8).



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

- B. Emission Unit #S2.002 (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting (continued)
 - c. **NSPS Subpart Dc Compliance** Since **S2.002** will combust only distillate fuel that contains less than 0.5% sulfur by weight, **S2.002** is not subject to the SO₂, PM and opacity limits in 40 CFR Part 60, Subpart Db (per 40 CFR §60.42c(d), §60.43c(e)(4), and 71 FR 9868). However, **S2.002** is subject to the NSPS Subpart Dc compliance requirements listed below:
 - (1) *The Permittee* shall submit a notification of the date construction of **S2.002** is commenced postmarked no later than 30 days after such date. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include the following: (40 CFR §60.48c(a))
 - (i) The design heat input capacity of **S2.002** and identification of the fuels to be combusted in the **S2.002**. (40 CFR 60.48c(a)(1))
 - (ii) A copy of the Federally enforceable requirement that limits the annual capacity factor for any fuel, and (40 CFR \$60.48c(a)(2))
 - (iii) The annual capacity factor at which the Permittee anticipates operating the facility. (40 CFR §60.48c(a)(3))
 - (3) *The Permittee* shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in §60.41c. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period. (40 CFR §60.48c(e)(11))
 - (4) The reporting period for the reports required under Subpart Dc is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. (40 CFR §60.48c(j))
 - (5) **The Permittee** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction of **S2.002**; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR §60.7(b))
 - (6) All records required under this section shall be maintained by *the Permittee* for a period of 2 years following the date of such record. (40 CFR §60.48c(i))



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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions

C. Emission Unit #S2.003 – Ultra Low Sulfur Distillate Fuel-Fired Auxiliary Boiler. UTM: North 4,091.332 km, East 746.650 km (Zone 11)

System 03 - Ultra Low Sulfur Distillate Fuel -Fired Auxiliary Boiler #2

S2.003 Auxiliary Boiler, Manufacturer TBD, Model # TBD, Serial # TBD, Unit Manufactured TBD. 86.4 million Btu/hr - Maximum Heat Input Rate

1. NAC 445B.3405

Air Pollution Equipment

- a. Emissions from S2.003 shall be controlled by the following combustion practices. The following control technologies shall be utilized to minimize the formation of NO_x during the combustion process:
 - (1) Low NO_x Burner.
 - (2) Flue Gas Recirculation.

b. Stack Parameters

Height: 98.0 ft Diameter: 2.92 ft

Stack Temperature: 284 °F Velocity: 82.0 ft/sec

Volume Flow: 33,038 ACFM

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.003**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **S2.003**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of PM (particulate matter) filterable, to the atmosphere will not exceed **1.51** pounds per hour, based on a 3-hour averaging period. The discharge of PM₁₀ (particulate matter less than 10 microns in diameter), filterable and condensable, to the atmosphere will not exceed **2.08** pounds per hour, based on a 3-hour averaging period.
 - (2) NAC 445B.2203 The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.36** pound per million Btu, based on a 3-hour averaging period.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM filterable, to the atmosphere will not exceed **0.018** pound per million Btu, based on a 3-hour averaging period. The discharge of PM₁₀, filterable and condensable, to the atmosphere will not exceed **0.024** pound per million Btu, based on a 3-hour averaging period.



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- C. Emission Unit #S2.003 (continued)
 - 2. NAC 445B.3405
 - a. Emission Limits (continued)
 - (4) NAC 445B.305 The discharge of SO₂ (sulfur dioxide) to the atmosphere will not exceed **0.14** pound per hour, based on a 3-hour averaging period.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of SO₂ to the atmosphere will not exceed **0.002** pound per million Btu, based on a 3-hour averaging period.
 - (6) NAC 445B.22047(3) The discharge of sulfur to the atmosphere will not exceed **60.48** pounds per hour, based on a 3-hour averaging period.
 - (7) NAC 445B.305 The discharge of NO_x to the atmosphere will not exceed **8.64** pounds per hour, based on a 3-hour averaging period.
 - (8) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x (oxides of nitrogen) to the atmosphere will not exceed **0.1** pound per million Btu, based on a 3-hour averaging period.
 - (9) NAC 445B.305 The discharge of CO to the atmosphere will not exceed **3.15** pounds per hour, based on a 3-hour averaging period.
 - (10) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of CO (carbon monoxide) to the atmosphere will not exceed **0.036** pound per million Btu, based on a 3-hour averaging period.
 - (11) NAC 445B.305 The discharge of VOC (volatile organic compounds) to the atmosphere will not exceed **0.21** pound per hour, based on a 3-hour averaging period.
 - (12) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of VOC to the atmosphere will not exceed **0.003** pound per million Btu, based on a 3-hour averaging period.
 - (13) NAC 445B.305 The discharge of sulfuric acid mist to the atmosphere will not exceed **0.0029** pound per hour, based on a 3-hour averaging period.
 - (14) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of H₂SO₄ (sulfuric acid mist) to the atmosphere will not exceed **0.0004** pound per million Btu, based on a 3-hour averaging period.
 - (15)NAC 445B.22017 The opacity from **S2.003** will not equal or exceed 20%. The opacity must be determined as set forth in 445B.22017.1(a) or (b).



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
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- C. Emission Unit #S2.003 (continued)
 - 2. NAC 445B.3405
 - Emission Limits (continued)
 - b. Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirements.
 - (1) 40 CFR Part 63.52(b)(1) When one or more sources in a category or subcategory subject to the requirements of 40 CFR Part 63.52 are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke section 112(g) of the Clean Air Act requirements, *The Permittee* must submit an application meeting the requirements of 40 CFR Part 63.53(a) within 30 days of startup of the source.



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

- C. Emission Unit #S2.003 (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. **S2.003** will only combust distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight.
- b. S2.003 will not operate more than 550.0 hours per year, based on a 12-month rolling period.
- c. The maximum operating heat input rate for \$2.003 will not exceed 86.4 million Btu per any one-hour period.
- d. The maximum allowable distillate fuel consumption rate for \$2.003 will not exceed 631.0 gallons per hour.



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 (continued)

4. NAC 445B.3405 (NAC 445B.316) Part 70 Program

Monitoring and Record keeping

- a. The Permittee, upon issuance of this operating permit will:
 - (1) Monitor and record the total consumption of distillate fuel for **S2.003** on a daily basis, for each day or part of a day that **S2.003** is operating.
 - (2) Monitor and record the hours of operation for **S2.003** on a daily basis, for each day or part of a day that **S2.003** is operating.
 - (3) Conduct and record a visible emission inspection on the exhaust stack of **\$2.003**, for each day, or part of a day that **\$2.003** is operating; record the time of the survey and indicate whether any visible emission was observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (4) The required monitoring established in (1) through (3) above, will be maintained in a contemporaneous log containing at a minimum, the following record keeping for each day, or part of a day that **S2.003** is operating:
 - (i) The calendar date of any required monitoring.
 - (ii) The total daily hours of operation for the corresponding date.
 - (iii) The total daily fuel consumption rate of distillate fuel, in gallons, for the corresponding date.
 - (iv) The corresponding average hourly fuel consumption rate of distillate fuel, in gallons per hour. The average hourly fuel consumption rate will be determined from the daily fuel consumption rate and the total daily hours of operation recorded in (ii) and (iii) above.
 - (v) Results and verification of the visible emissions survey, and documentation of any Method 9 visible emission tests that were undertaken, including all documents required under 40 CFR Part 60, Appendix A.



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 (continued)

- 4. NAC 445B.3405 (NAC 445B.316) Part 70 Program
 - b. Compliance/Performance Testing

Within 100.0 operating hours of the notification of initial startup of S2.003, as required in Section II.A.3, the Permittee shall:

- (1) Conduct and record a Method 5 performance test for PM on the exhaust stack of **S2.003** consisting of three valid runs. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5, and include the back-half catch.
- (2) Conduct and record a Method 201A and 202 performance test for PM₁₀ on the exhaust stack of S2.003 consisting of three valid runs. The Method 201A and 202 emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201A and 202. The Method 201A and 202 emissions tests may be replaced by the Method 5 performance test required in B.4.b.(1) above. All particulate captured in the Method 5 test will be considered PM₁₀ for compliance demonstration purposes. The sample time for each test run shall be at least 60 minutes. The sample volume for each test run shall be at least 60 dry standard cubic feet per minute (dscfm).
- (3) Conduct and record a Method 7E performance test for NO_x on the exhaust stack of **S2.003** consisting of three valid runs. The Method 7E emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 7E.
- (6) Conduct and record a Method 10 performance test for CO on the exhaust stack of **S2.003** consisting of three valid runs. The Method 10 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 10.
- (7) Conduct and record a Method 25 performance test for VOC on the exhaust stack of **S2.003** consisting of three valid runs. The Method 25 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 25.
- (6) Conduct and record a Method 6 performance test for SO₂ on the exhaust stack of **S2.003** consisting of three valid runs. The Method 6 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 6. To determine the sulfur emission rate, *the Permittee* shall divide the SO₂ emission rate by 2.
- (7) Conduct and record Method 8A performance test for H₂SO₄ mist on the exhaust stack of **S2.003** consisting of three valid runs. The Method 8A emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 8A.
- (8) During one of the three test runs required in C.4.b.(1) or (2) of this section, conduct and record a Method 9 visual opacity observation of the discharge from the exhaust stack of **S2.003**. The Method 9 opacity test must be conducted in accordance with the visible emissions evaluation procedures contained in 40 CFR Part 60, Appendix A, Method 9. A certified visible emissions reader must conduct the visible emissions evaluations for a period of at least 6 minutes. The opacity readings must be averaged such that compliance with a 6-minute average is determined.



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

C. Emission Unit #S2.003 (continued)

4. NAC 445B.3405 (NAC 445B.316) <u>Part 70 Program</u> Compliance, Monitoring, Recordkeeping and Reporting (continued)

- b. **Compliance/Performance Testing** (Continued)
 - (9) The performance tests will be conducted at the maximum operating heat input rate limit established in C.3.c of this section for each pollutant required to be tested, unless otherwise approved pursuant to NAC 445B.252.2 & 3. *The Permittee* shall make available to the director such records as may be necessary to determine the conditions of the performance test. Operations during periods of startup, shutdown and malfunction must not constitute representative conditions of a performance test unless otherwise specified in the applicable standard (NAC 445B.252.3).
 - (10) *The Permittee* shall give notice to the director 30 days before the performance test to allow the director to have an observer present. A written testing procedure for the performance test must be submitted to the director at least 30 days before the test of performance to allow the director to review the proposed testing procedures (NAC 445B.252.4). Alternatives to the reference methods and procedures provided in B.4.b. of this section may be utilized to the extent that they are applicable to **S2.003**, and must be identified in the testing procedures as alternative methods.
 - (11) During each performance test required in C.4.b.(1) through (7) of this section, record the quantity (in gallons) of distillate fuel combusted during each test run, the heat content value of the distillate fuel combusted during each test run (in Btu/gallon) and include these data in the test results submitted.
 - (12) Within 60 days after completing the performance tests and opacity observations contained in C.4.b. of this section, *the Permittee* shall furnish the director a written report of the results of the performance tests, the opacity observations and the resultant emissions factors. All information and analytical results of testing and sampling must be certified as to the truth and accuracy and as to their compliance with NAC 445B.001 to 445B.3791 (NAC 445B.252.8).



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

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Section V. Specific Operating Conditions (continued)

- C. Emission Unit #S2.003 (continued)
 - 4. NAC 445B.3405
 - Compliance, Monitoring, Recordkeeping and Reporting (continued)
 - c. **NSPS Subpart Dc Compliance** Since **S2.003** will combust only distillate fuel that contains less than 0.5% sulfur by weight, **S2.003** is not subject to the SO₂, PM and opacity limits in 40 CFR Part 60, Subpart Db (per 40 CFR §60.42c(d), §60.43c(e)(4), and 71 FR 9868). However, **S2.003** is subject to the NSPS Subpart Dc compliance requirements listed below:
 - (1) *The Permittee* shall submit a notification of the date construction of **S2.003** is commenced postmarked no later than 30 days after such date. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include the following: (40 CFR §60.48c(a))
 - (i) The design heat input capacity of **S2.003** and identification of the fuels to be combusted in the **S2.003**. (40 CFR §60.48c(a)(1))
 - (ii) A copy of the Federally enforceable requirement that limits the annual capacity factor for any fuel, and (40 CFR \$60.48c(a)(2))
 - (iii) The annual capacity factor at which *the Permittee* anticipates operating the facility. (40 CFR §60.48c(a)(3))
 - (3) *The Permittee* shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in §60.41c. For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period. (40 CFR §60.48c(e)(11))
 - (4) The reporting period for the reports required under Subpart Dc is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. (40 CFR §60.48c(j))
 - (5) **The Permittee** shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction of **S2.003**; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (40 CFR §60.7(b))
 - (6) All records required under this section shall be maintained by *the Permittee* for a period of 2 years following the date of such record. (40 CFR §60.48c(i))



BUREAU OF AIR POLLUTION CONTROL

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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146

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Section V. Specific Operating Conditions (continued)

D. Emission Unit \$2.004 - Emergency Generator Engine UTM: North 4,091.331 km, East 746.563 km (Zone 11)

System 04 Emergency Generator Engine

S2.004 Emergency Diesel Engine Driven Generator; 1,482 Brake Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **S2.004** shall be controlled via good combustion practices, proper maintenance, and the use of low-sulfur fuel.

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.004**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.004**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.49** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.02** ton per year, based on a rolling 12-month averaging period.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.49** pound per hour. The discharge of PM_{10} to the atmosphere will not exceed **0.02** ton per year, based on a rolling 12-month averaging period.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere will not exceed **0.2** gram per kilowatt-hour, based on a rolling 3-hour averaging period.
 - (4) NAC 445B.305 The discharge of SO_2 (sulfur dioxide) to the atmosphere will not exceed 0.36 pound per hour. The discharge of SO_2 to the atmosphere will not exceed 0.02 ton per year, based on a rolling 12-month averaging period.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **SO₂** to the atmosphere will not exceed **0.11** gram per brake horsepower-hour, based on a rolling 3-hour averaging period.
 - (6) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed 15.68 pounds per hour. The discharge of NO_x to the atmosphere will not exceed 0.78 ton per year, based on a rolling 12-month averaging period.
 - (7) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x to the atmosphere will not exceed **6.4** grams per kilowatt-hour, based on a rolling 3-hour averaging period.
 - (8) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **8.49** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.42** ton per year, based on a rolling 12-month averaging period.
 - (9) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **CO** to the atmosphere will not exceed **3.5** grams per kilowatthour, based on a rolling 3-hour averaging period.
 - (10) NAC 445B.22017 The opacity from the **S2.004** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146

CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

- D. Emission Unit S2.004 Emergency Generator Engine. (continued)
 - 2. NAC 445B.3405

Emission Limits (Continued)

- b. New Source Performance Standards
 - (1) 40 CFR § 60.4205(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of 2007 model year or later emergency stationary compression ignition (CI) internal combustion engine (ICE) with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new, non-road CI engines in 40 CFR § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
 - (i) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new, non-road CI engines for the same model year and maximum engine power in 40 CFR § 89.112 and 40 CFR § 89.113, for all pollutants beginning in model year 2007 apply. (40 CFR § 60.4202(a)(2))
 - (ii) Exhaust emissions from non-road engines to which this subpart is applicable shall not exceed the applicable exhaust emission standards as follows:

For engines with a rated power of greater than 560 kW, the following emission standards (in g/kW-hr) apply:

- (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed **6.4** g/kW-hr;
- (B) Carbon Monoxide (CO) shall not exceed 3.5 g/kW-hr;
- (C) Particulate Matter (PM) shall not exceed 0.20 g/kW-hr).

(40 CFR § 89.112(a))

- (iii) Exhaust opacity from compression ignition, non-road engines, for which this subpart is applicable, must not exceed:
 - (A) **20** percent during the acceleration mode;
 - (B) 15 percent during the lugging mode; and
 - (C) **50** percent during the peaks in either the acceleration or lugging modes.

As measured and calculated per 40 CFR Part 86, Subpart I. (40 CFR §89.113(a) and (b))

- (2) 40 CFR § 60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR § 80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))
- (3) 40 CFR § 60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR § 80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146
CLASS I AIR QUALITY

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Section V. Specific Operating Conditions (continued)

D. Emission Unit S2.004 – Emergency Generator Engine. (continued)

3. NAC 445B.3405

Operating Parameters

- a. S2.004 may only combust distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight.
- b. **S2.004** may not combust more than **91.8** gallons of distillate fuel per hour.
- c. **S2.004** may not operate on a routine basis in excess of **100** hours per calendar year. If additional firing is required in case of emergency, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.



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Section V. Specific Operating Conditions (continued)

- D. Emission Unit S2.004 Emergency Generator Engine. (continued)
 - 4. NAC 445B.3405

Monitoring, Record keeping and Compliance

- a. Upon commencement of operation, *the Permittee* will:
 - (1) Monitor and record the total daily hours of operation of **S2.004** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.004** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.004** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in D.4.a.(1) and D.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharge of **\$2.004** while the Diesel Engine Driven Generator is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR § 60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** shall comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in D.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR § 60.4209(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> As an owner or operator of an emergency stationary CI ICE, you must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR § 60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR § 60.4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR § 60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.
 - (9) 40 CFR § 63.6590(b) <u>Federally Enforceable National Emission Standards for Hazardous Air Pollutants Requirement</u> The Permittee does not have to meet the requirements of this subpart and of subpart A of 40 CFR Part 63 except for the initial notification requirements of 40 CFR § 63.6645(d).



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Section V. Specific Operating Conditions (continued)

E. Emission Unit S2.005 – Emergency Firewater Pump Engine UTM: North 4,091.439 km, East 746.638 km (Zone 11)

System 05 Emergency Firewater Pump Engine

S2.005 Emergency Firewater Pump Engine; 284 Brake Horsepower Output

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **S2.005** shall be controlled via good combustion practices, proper maintenance, and the use of low-sulfur fuel.

2. NAC 445B.3405

Emission Limits

- a. On and after the date of startup of **S2.005**, Permittee will not discharge or cause the discharge into the atmosphere from the stack discharge of **S2.005**, the following pollutants in excess of the following specified limits:
 - (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.09** pound per hour. The discharge of **PM** to the atmosphere will not exceed **0.005** ton per year, based on a rolling 12-month averaging period.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.09** pound per hour. The discharge of PM_{10} to the atmosphere will not exceed **0.005** ton per year, based on a rolling 12-month averaging period.
 - (3) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere will not exceed **0.2** gram per kilowatt-hour, based on a 3-hour averaging period.
 - (4) NAC 445B.305 The discharge of **SO**₂ (sulfur dioxide) to the atmosphere will not exceed **0.004** pound per hour. The discharge of **SO**₂ to the atmosphere will not exceed **0.0002** ton per year, based on a rolling 12-month averaging period.
 - (5) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **SO₂** to the atmosphere will not exceed **0.006** gram per brake horsepower-hour, based on a 3-hour averaging period.
 - (6) NAC 445B.305 The discharge of NO_x (nitrogen oxides) to the atmosphere will not exceed 1.88 pounds per hour. The discharge of NO_x to the atmosphere will not exceed 0.09 ton per year, based on a rolling 12-month averaging period.
 - (7) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of NO_x to the atmosphere will not exceed **4.0** grams per kilowatt-hour, based on a 3-hour averaging period.
 - (8) NAC 445B.305 The discharge of **CO** (carbon monoxide) to the atmosphere will not exceed **1.63** pounds per hour. The discharge of **CO** to the atmosphere will not exceed **0.08** ton per year, based on a rolling 12-month averaging period.
 - (9) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **CO** to the atmosphere will not exceed **3.5** grams per kilowatthour, based on a 3-hour averaging period.
 - (10) NAC 445B.22017 The opacity from the **S2.005** stack discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

- E. Emission Unit S2.005 Emergency Firewater Pump Engine. (continued)
 - 2. NAC 445B.3405

Emission Limits (Continued)

- b. New Source Performance Standards
 - (1) 40 CFR § 60.4205(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in Table 4 of 40 CFR Part 60, Subpart IIII. The following emission standards (in g/kw-hr) apply
 - (i) For engines with a maximum engine power of greater than 225 kW, but less than 450 kW, the following emission standards (in g/kW-hr) apply:
 - (A) Non-methane hydrocarbon (NMHC) + Oxides of Nitrogen (NO_x), combined, shall not exceed 4.0 g/kW-hr;
 - (B) Carbon Monoxide (CO) shall not exceed 3.5 g/kW-hr;
 - (C) Particulate Matter (PM) shall not exceed 0.20 g/kW-hr).
 - (2) 40 CFR § 60.4207(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
 - (i) Beginning June 1, 2007, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 500 parts per million (ppm) maximum. (40 CFR 80.510(a)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(a)(2))
 - (3) 40 CFR § 60.4207(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR § 80.510(b) for non-road diesel fuel.
 - (i) Beginning June 1, 2010, except as otherwise specifically provided in this subpart, all Non-road diesel fuel is subject to the following per-gallon standards:
 - (A) Sulfur content 15 (ppm) maximum. (40 CFR 80.510(b)(1))
 - (B) Cetane index or aromatic content minimum cetane index of 40 or maximum aromatic content of 35 volume percent. (40 CFR § 80.510(b)(2))



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Section V. Specific Operating Conditions (continued)

- E. Emission Unit S2.005 Emergency Firewater Pump Engine. (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. S2.005 may only combust distillate fuel with a sulfur content not to exceed 0.0015% sulfur, by weight.
- b. **S2.005** may not combust more than **17.6** gallons of distillate fuel per hour.
- c. **S2.005** may not operate on a routine basis in excess of **100** hours per calendar year. If additional firing is required for emergency fire protection, *the Permittee* will document the emergency and handle the operation as excess emissions as required by Section III.B.4.



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Section V. Specific Operating Conditions (continued)

- E. Emission Unit S2.005 Emergency Firewater Pump Engine. (Continued)
 - 4. NAC 445B.3405
 - Monitoring, Record keeping and Compliance
 - a. Upon commencement of operation, the Permittee will:
 - (1) Monitor and record the total daily hours of operation of **S2.005** each day of operation.
 - (2) Monitor and record the total daily fuel consumption for **S2.005** each day of operation.
 - (3) Record average hourly fuel consumption for **S2.005** each day of operation. The average will be determined using the total hours of operation and total daily fuel consumption in E.4.a.(1) and E.4.a.(2) of this section.
 - (4) Conduct and record a Method 9 visible emissions test on the stack discharges of **S2.005** while the Emergency Diesel Engine Driven Firewater Pump is operating, on an annual basis. The Method 9 visible emissions test must be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
 - (5) 40 CFR §60.4211(c) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** must comply with the applicable NSPS Subpart IIII emission limits by purchasing an engine certified to the emission standards in E.2.b.(1) of this section. The engine must be installed and configured according to the manufacturer's specifications.
 - (6) 40 CFR §60.4209(a) <u>Federally Enforceable New Source Performance Standard Requirement</u> As an owner or operator of an emergency stationary CI ICE, *the Permittee* must install a non-resettable hour meter prior to startup of the engine.
 - (7) 40 CFR §60.4211(e) <u>Federally Enforceable New Source Performance Standard Requirement</u> Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
 - (8) 40 CFR §4214(b) <u>Federally Enforceable New Source Performance Standard Requirement</u> **The Permittee** is not required to submit an initial notification (i.e., notifications of construction and startup) under 40 CFR §60.7. Starting with the model years in table 5 in 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, **the Permittee** must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. **The Permittee** must record the time of operation of the engine and the reason the engine was in operation during that time.



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Section V. Specific Operating Conditions (continued)

F. Emission Units PF1.001 through PF1.004 – Fugitive Coal Handling Operations, Coal Rail Car Unloading.

UTM: North 4,091.454 km, East 746.940 km (Zone 11)

System 06	Coal Rail Car Unloading Operations
PF1.001 PF1.002	Rail Car transfer of coal to Underground Hoppers Underground Hoppers transfer to Unload Feeders #1 & #2
PF1.003 PF1.004	Unload Feeder #1 transfer to Coal Unloading Conveyor #1 Unload Feeder #2 transfer to Coal Unloading Conveyor #2

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from PF1.001 and PF1.002 shall be controlled by fogging water sprays. Emissions from PF1.003 and PF1.004 shall be controlled by a partial enclosure located at PF1.003 and PF1.004, each and by the water sprays located at PF1.001 and PF1.002.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.001 through PF1.004**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 through PF1.004**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.001** will not exceed **0.0275** pound per hour. The discharge of **PM** to the atmosphere from **PF1.001** will not exceed **0.0075** ton per year, based on a rolling 12-month averaging period. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by F.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.001 will not exceed 0.0275 pound per hour. The discharge of PM_{10} to the atmosphere from PF1.001 will not exceed 0.0075 ton per year, based on a rolling 12-month averaging period. This limit is less than the 100.4 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by F.3.a of this section.
 - (3) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.002** will not exceed **0.0275** pound per hour. The discharge of **PM** to the atmosphere from **PF1.002** will not exceed **0.0075** ton per year, based on a rolling 12-month averaging period. This limit is less than the **90.06** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by F.3.a of this section.
 - (4) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.002** will not exceed **0.0275** pound per hour. The discharge of **PM**₁₀ to the atmosphere from **PF1.002** will not exceed **0.0075** ton per year, based on a rolling 12-month averaging period. This limit is less than the **90.06** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by F.3.a of this section.
 - (5) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.003** will not exceed **0.0275** pound per hour. The discharge of **PM** to the atmosphere from **PF1.003** will not exceed **0.0075** ton per year, based on a rolling 12-month averaging period. This limit is less than the **90.06** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by F.3.a of this section.
 - (6) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.003 will not exceed 0.0275 pound per hour. The discharge of PM_{10} to the atmosphere from PF1.003 will not exceed 0.0075 ton per year, based on a rolling 12-month averaging period. This limit is less than the 90.06 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by F.3.a of this section.



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Section V. Specific Operating Conditions (continued)

F. Emission Units PF1.001 through PF1.004 - Fugitive Coal Handling Operations, Coal Rail Car Unloading. (continued)

2. NAC 445B.3405

Emission Limits (Continued)

On and after the date of startup of **PF1.001 through PF1.004**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.001 through PF1.004**, the following pollutants in excess of the following specified limits: (Continued)

- n. (7) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.004** will not exceed **0.0275** pound per hour. The discharge of **PM** to the atmosphere from **PF1.004** will not exceed **0.0075** ton per year, based on a rolling 12-month averaging period. This limit is less than the **90.06** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by F.3.a of this section.
 - (8) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.004 will not exceed 0.0275 pound per hour. The discharge of PM_{10} to the atmosphere from PF1.004 will not exceed 0.0075 ton per year, based on a rolling 12-month averaging period. This limit is less than the 90.06 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by F.3.a of this section.
 - (9) NAC 445B.22017 The opacity from **PF1.001 through PF1.004** each, will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

- F. Emission Units PF1.001 through PF1.004 Fugitive Coal Handling Operations, Coal Rail Car Unloading. (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable throughput rate for **System 6** will not exceed **5,000.0** tons of coal per any one-hour period.
- b. Maximum allowable throughput rate for **System 6** will not exceed **2,944,000** tons of coal per 12-month rolling period.
- c. **System 5** may operate 8,760 hours per year.
- d. BACT Requirement Emissions from PF1.001 and PF1.002 shall be controlled by fogging water sprays. Emissions from PF1.003 and PF1.004 shall be controlled by a partial enclosure located at PF1.003 and PF1.004, each and by the water sprays located at PF1.001 and PF1.002.
- 4. NAC 445B.3405
 - a. Monitoring and Recordkeeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the weight rate of each batch or charge load of coal to **System 06** on a daily basis:
 - (i) Monitor and record weight of coal unloaded from rail car at PF1.001.
 - (ii) Monitor and record the total weight of coal transferred to PF1.002 through PF1.004.
- (2) Monitor and record the hours of operation of **PF1.001 through PF1.004 each**, on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on **PF1.001 through PF1.004 each**, while **System 06** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Section V. Specific Operating Conditions (continued)

G. Emission Units S2.006 and S2.007 - Coal Transfer Operations, Coal Transfer House.

UTM: North 4,091.315 km, East 746.655 km (Zone 11)

System 07 Coal Transfer Operations; Coal Transfer House

S2.006 Coal Unloading Conveyor transfer to Coal Yard Conveyor Belt S2.007 Coal Yard Conveyor Belt transfer to Coal Transfer House

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.006** and **S2.007** each, shall be ducted to a control system consisting of a **Baghouse** with 100% capture and a maximum volume flow rate of **8,833** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 105.0 ft
Stack Diameter: 2.5 ft
Stack Velocity: 57.73 ft/sec
Stack Temperature: Ambient
Volume Flow Rate: 8,833 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.006** and **S2.007**, Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of **Transfer House Baghouse**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.38** pound per hour, based on a 3-hour averaging period. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445B.732 and the maximum allowable throughput as limited by G.3.a of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.38** pound per hour, based on a 3-hour averaging period. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by G.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **Transfer House Baghouse** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the stack of **Transfer House Baghouse** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

- G. Emission Units S2.006 and S2.007 Coal Transfer Operations, Coal Transfer House. (continued)
 - 2. NAC 445B.3405

Emission Limits (Continued)

- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.006 and S2.007** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **S2.006 and S2.007** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.006** and **S2.007** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))
- NAC 445B.3405

Operating Parameters

- a. Maximum allowable throughput rate for \$2.006 and \$2.007 will not exceed 5,000.0 tons of coal per any one-hour period.
- b. **S2.006 and S2.007** may operate 8,760 hours per year.
- 4. NAC 445B.3405
 - a. Monitoring and Recordkeeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the weight rate of each batch or charge load of coal to **System 07** on a daily basis.
- (2) Monitor and record the hours of operation of S2.006 and S2.007 on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on **S2.006 and S2.007** while **System 07** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **Transfer House Baghouse** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146 CLASS I AIR QUALITY

OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

G. Emission Units S2.006 and S2.007 - Coal Transfer Operations, Coal Transfer House. (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 07**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in G.5.a.(8) of this section, *the Permittee* shall conduct opacity observations in accordance with G.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))



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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

H. Emission Units PF1.005 through PF1.007 - Coal Transfer Operations, Coal Stack-out Operations.

UTM: North 4,091.451 km, East 746.793 km (Zone 11)

System 08	Coal Transfer Operations, Coal Stack-out Operations
PF1.005 PF1.006 PF1.007	Conveyor transfer to In-line Stack-out Conveyor In-line Stack-out Conveyor transfer to Coal Pile Coal Yard Conveying/Transfer

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.005** and **PF1.006** shall be controlled by water sprays. Emissions from **PF1.007** shall be controlled by a partial enclosure located at **PF1.007**.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.005 through PF1.007**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.005 through PF1.007**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.005** will not exceed **0.18** pound per hour, nor more than **0.05** ton per year. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by H.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.005 will not exceed 0.18 pound per hour, nor more than 0.05 ton per year. This limit is less than the 100.4 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by H.3.a of this section.
 - (3) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.006** will not exceed **0.18** pound per hour, nor more than **0.05** ton per year. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by H.3.a of this section.
 - (4) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.006 will not exceed 0.18 pound per hour, nor more than 0.05 ton per year. This limit is less than the 100.4 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by H.3.a of this section.
 - (5) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.007** will not exceed **0.18** pound per hour, nor more than **0.05** ton per year. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by H.3.a of this section.
 - (6) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.007** will not exceed **0.18** pound per hour, nor more than **0.05** ton per year. This limit is less than the **100.4** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by H.3.a of this section.
 - (7) NAC 445B.22017 The opacity from **PF1.005 through PF1.007** will not equal or exceed 20% in accordance with NAC 445B.22017.



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CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

- H. Emission Units PF1.005 through PF1.007 Coal Transfer Operations, Coal Stack-out Operations. (continued)
 - 2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.005 through PF1.007**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.005 through PF1.007**, the following pollutants in excess of the following specified limits: (Continued)

- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **PF1.005 through PF1.007** will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.005 through PF1.007** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **PF1.005 through PF1.007** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))
- 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable throughput rate for **PF1.005 through PF1.007 each**, will not exceed **5,000.0** tons of coal per any one-hour period.
- b. Maximum allowable throughput rate for **PF1.005 through PF1.007 each**, will not exceed **2,944,000** tons of coal per 12-month rolling period.
- c. **PF1.005 through PF1.007 each,** may operate **8,760** hours per calendar year.
- d. *BACT Requirement* Emissions from **PF1.005** and **PF1.006** shall be controlled by water sprays. Emissions from **PF1.007** shall be controlled by a partial enclosure located at **PF1.007**.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, the Permittee will:

- (1) Monitor and record the throughput rate of coal to **PF1.005 through PF1.007 each**, on a daily basis.
- (2) Monitor and record the hours of operation of **PF1.005** through **PF1.007** each, on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on **PF1.005 through PF1.007 each**, while **System 08** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

H. Emission Units PF1.005 through PF1.007 - Coal Transfer Operations, Coal Stack-out Operations. (continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 08**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in H.5.a.(8) of this section, *the Permittee* shall conduct opacity observations in accordance with H.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))



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CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

I. Emission Units PF1.008 through PF1.010 - Coal Transfer Operations, Coal Storage Piles.

UTM: North 4,091.451 km, East 746.793 km (Zone 11)

01111. 1101111 1,001.131 km, Edst 7 10.793 km (Edite 11)		
System 09	Coal Transfer Operations - Coal Storage Piles (Active and Inactive)	
PF1.008 PF1.009	Active Coal Pile Wind Erosion Inactive Coal Pile Wind Erosion	
PF1.010	Active Coal Pile - Maintenance/Bulldozing	

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.008** and **PF1.010** shall be controlled by water sprays. Emissions from **PF1.009** shall be controlled by water sprays and a coal pile binder or compaction.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.008 through PF1.010**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.008 through PF1.010**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.008** will not exceed **0.87** pound per hour, nor more than **3.81** tons per year.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.008 will not exceed 0.87 pound per hour, nor more than 3.81 tons per year.
 - (3) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.009** will not exceed **0.19** pound per hour, nor more than **0.83** ton per year.
 - (4) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from PF1.009 will not exceed 0.19 pound per hour, nor more than 0.83 ton per year.
 - (5) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.010** will not exceed **1.38** pounds per hour, nor more than **2.59** tons per year.
 - (6) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.010** will not exceed **1.38** pounds per hour, nor more than **2.59** tons per year.
 - (7) NAC 445B.22017 The opacity from **PF1.008 through PF1.010 each**, will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

- I. Emission Units PF1.008 through PF1.010 Coal Transfer Operations, Coal Storage Piles. (Continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. **PF1.008 through PF1.010 each,** may operate **8,760** hours per calendar year.
- b. *BACT Requirement* Emissions from **PF1.008 and PF1.010** shall be controlled by water sprays. Emissions from **PF1.009** shall be controlled by water sprays and a coal pile binder or compaction.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, the Permittee will:

- (1) Monitor and record the hours of operation of **PF1.008 through PF1.010** on a daily basis.
- (2) Conduct and record a weekly visible emission inspection on **PF1.008 through PF1.010** while **System 09** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Facility ID No. A0381 DRAFT PERMIT NO. AP4911-1146

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Section V. Specific Operating Conditions (continued)

J. Emission Units S2.008 through S2.012 - Coal Transfer Operations, Coal Crusher Building.

UTM: North 4,091.549 km, East 746.705 km (Zone 11)

System 10 Coal Transfer Operations, Coal Crusher Building

S2.008 Reclaim Conveyor #1 transfer to Crusher Building Surge Bin S2.009 Reclaim Conveyor #2 transfer to Crusher Building Surge Bin S2.010 Transfer from Crusher Building Surge Bin to Coal Crusher S2.011 Coal Crusher S2.012 Coal Crusher transfer to Plant Feed Conveyor

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.008 through S2.012 each**, shall be ducted to a control system consisting of a **Baghouse** with 100% capture and a maximum volume flow rate of **8,833** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 152.0 ft
Stack Diameter: 2.1 ft
Stack Velocity: 52.38 ft/sec
Stack Temperature: Ambient
Volume Flow Rate: 8.833 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.008 through S2.012**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Coal Crusher Building Baghouse**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.38** pound per hour, based on a 3-hour averaging period. This limit is less than the **92.7** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by J.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.38 pound per hour, based on a 3-hour averaging period. This limit is less than the 92.7 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by J.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Coal Crusher Building Baghouse** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Coal Crusher Building Baghouse** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.



BUREAU OF AIR POLLUTION CONTROL

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Section V. Specific Operating Conditions (continued)

J. Emission Units S2.008 through S2.012 - Coal Transfer Operations, Coal Crusher Building. (Continued)

2. NAC 445B.3405

Emission Limits (Continued)

- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.008 through S2.012 each**, will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Coal Crusher Building Baghouse** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.008 through S2.012 each,** including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable throughput rate for **S2.008 through S2.012 each**, will not exceed **3,000.0** tons of coal per any one-hour period.
- b. **S2.008 through S2.012 each,** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, *Permittee will*:

- (1) Monitor and record the throughput rate of coal to **S2.008 through S2.012 each**, on a daily basis.
- (2) Monitor and record the hours of operation of **S2.008 through S2.012 each**, on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Coal Crusher Building Baghouse**, while **System 10** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Coal Crusher Building Baghouse** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



BUREAU OF AIR POLLUTION CONTROL

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Section V. Specific Operating Conditions (continued)

- J. Emission Units S2.008 through S2.012 Coal Transfer Operations, Coal Crusher Building. (Continued)
 - 5. NAC 445B.3405
 - a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) *The Permittee* shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 10**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in J.5.a.(8) of this section, *the Permittee* shall conduct opacity observations in accordance with J.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))



BUREAU OF AIR POLLUTION CONTROL

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CLASS I AIR QUALITY
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Section V. Specific Operating Conditions (continued)

K. Emission Units S2.013 through S2.018 – Tripper Deck Operations.

UTM: North 4,091.315 km, East 746.655 km (Zone 11)

System 11	Tripper Deck Operations
G2 012	
S2.013	Tripper Deck Conveyor #1 transfer to Tripper Deck Surge Bin
S2.014	Tripper Deck Conveyor #2 transfer to Tripper Deck Surge Bin
S2.015	Tripper Deck Surge Bin transfer to Tripper Deck Belt Feeder
S2.016	Tripper Deck Belt Feeder transfer to Tripper House Conveyor
S2.017	Tripper House Conveyor transfer to Coal House Tripper Conveyor
S2.018	Coal House Tripper Conveyor transfer to Boiler Coal Storage Silos

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.013 through S2.018 each**, shall be ducted to a control system consisting of a **Baghouse** with 100% capture and a maximum volume flow rate of **11,667** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 270.0 ft
Stack Diameter: 4.0 ft
Stack Velocity: 53.04 ft/sec
Stack Temperature: Ambient
Volume Flow Rate: 11,667 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.013 through S2.018**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Tripper Deck Baghouse**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.50** pound per hour, based on a 3-hour averaging period. This limit is less than the **92.7** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by K.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.50 pound per hour, based on a 3-hour averaging period. This limit is less than the 92.7 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by K.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Tripper Deck Baghouse** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the stack of **the Tripper Deck Baghouse** will not exceed **0.005** grain per dry standard cubic foot, based on a 3-hour averaging period.



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CLASS I AIR QUALITY

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Section V. Specific Operating Conditions (continued)

- K. Emission Units S2.013 through S2.018 Tripper Deck Operations. (Continued)
 - 2. NAC 445B.3405

Emission Limits

- b. New Source Performance Standards Subpart Y Standards of Performance for Coal Preparation Plants (40 CFR Part 60.250) On and after the sixtieth day after achieving the maximum production rate at which **S2.013 through S2.018 each**, will be operated, but not later than 180 days after initial startup, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Tripper Deck Baghouse** the following pollutants in excess of the following specified limits:
 - (1) Emissions that exhibit greater than 20 percent opacity (40 CFR Part 60.252(c))
 - (2) The opacity standard set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60.11(c))
 - (3) At all times, including periods of startup, shutdown, and malfunction, *the Permittee* shall, to the extent practicable, maintain and operate **S2.013 through S2.018 each**, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions (40 CFR Part 60.11(d))
- 3. NAC 445B.3405

Operating Parameters

- Maximum allowable throughput rate for S2.013 through S2.018 each, will not exceed 3,000.0 tons of coal per any one-hour period.
- b. **S2.013 through S2.018 each,** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the throughput rate of coal to **S2.013 through S2.018** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.013 through S2.018** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Tripper Deck Baghouse** while **System 11** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- (4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Tripper Deck Baghouse** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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Section V. Specific Operating Conditions (continued)

K. Emission Units S2.013 through S2.018 - Tripper Deck Operations. (Continued)

5. NAC 445B.3405

- a. **NSPS Subpart Y Compliance Requirements** *The Permittee* shall comply with 40 CFR Part 60, Subpart Y by complying with the following conditions:
 - (1) *The Permittee* shall submit a notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (40 CFR §60.7(a)(1))
 - (2) *The Permittee* shall submit a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. (40 CFR §60.7(a)(3))
 - (3) **The Permittee** shall submit a notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (40 §60.7(a)(6))
 - (4) *The Permittee* shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of **System 11**. (40 CFR §60.7(b))
 - (5) Compliance with NSPS Subpart Y opacity standards shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR Part 60 or any alternative method that is approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. (40 CFR §60.11(b))
 - (6) Opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. *The Permittee* shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (40 CFR §60.11(e)(1))
 - (7) Except as provided in K.5.a.(8) of this section, *the Permittee* shall conduct opacity observations in accordance with K.5.a.(5) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results. The inability of *the Permittee* to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations. (40 CFR §60.11(e)(2))
 - (8) *The Permittee* may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. *The Permittee* shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the opacity testing notification required in §60.7(a)(6). (40 CFR §60.11(e)(3))



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Section V. Specific Operating Conditions (continued)

L. Emission Unit S2.019 - Bottom Ash Silo Operations - Silo Loading. UTM: North 4,091.231 km, East 746.681 km (Zone 11)

System 12 Bottom Ash Silo Operations

S2.019 Bottom Ash Silo - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.019** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **3,500** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 82.0 ft
Stack Diameter: 0.7 ft
Stack Velocity: 58.34
Stack Temperature: Ambient
Volume Flow Rate: 3,500 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.019**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Bottom Ash Silo Bin Vent Filter - Loading**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.30** pound per hour, based on a 3-hour averaging period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by L.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.30 pound per hour, based on a 3-hour averaging period. This limit is less than the 25.16 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by L.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

L. Emission Unit S2.019 - Bottom Ash Silo Operations - Silo Loading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.019 will not exceed 15.0 tons of bottom ash per any one-hour period.
- b. **S2.019** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, Permittee will:

- (1) Monitor and record the loading rate of bottom ash to **S2.019** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.019** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** while **System 12** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Bottom Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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Section V. Specific Operating Conditions (continued)

M. Emission Unit PF1.011 - Bottom Ash Silo Operations - Silo Unloading. UTM: North 4,091.231 km, East 746.681 km (Zone 11)

System 13 Bottom Ash Silo Operations

PF1.011 Bottom Ash Silo - Unloading

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.011** shall be controlled by best operational practices.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.011**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.011**, the following pollutants in excess of the following specified limits:

- (1) NAC 445B.305 The discharge of PM₁₀ to the atmosphere will not exceed **0.30** pound per hour or more than **1.31** tons per year. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by paragraph M.3.a. of this section.
- (2) NAC 445B.305 The discharge of PM to the atmosphere will not exceed **0.30** pound per hour or more than **1.31** tons per year. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by paragraph M.3.a. of this section.
- (3) NAC 445B.22017 The opacity from the **PF1.011** discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

M. Emission Unit PF1.011 - Bottom Ash Silo Operations - Silo Unloading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable discharge rate for PF1.011 will not exceed 15.0 tons of bottom ash per any one-hour period.
- b. **PF1.011** may operate **8,760** hours per calendar year.
- c. BACT Requirement Emissions from PF1.011 shall be controlled by best operational practices.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, the Permittee will:

- (1) Monitor and record the discharge rate of bottom ash for **PF1.011** on a daily basis.
- (1) Monitor and record the hours of operation of **PF1.011** on a daily basis.
- (2) Conduct and record a weekly visible emission inspection on **PF1.011** while **System 13** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Section V. Specific Operating Conditions (continued)

N. Emission Unit S2.020 - Fly Ash Silo Operations - Silo Loading. UTM: North 4,091.244 km, East 746.997 km (Zone 11)

System 14 Fly Ash Silo Operations

S2.020 Fly Ash Silo - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.020** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **4,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 62.0 ft
Stack Diameter: 0.7 ft
Stack Velocity: 58.34
Stack Temperature: Ambient
Volume Flow Rate: 4,000 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.020**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Fly Ash Silo Bin Vent Filter - Loading**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.30** pound per hour, based on a 3-hour averaging period. This limit is less than the **51.3** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by N.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.30 pound per hour, based on a 3-hour averaging period. This limit is less than the 51.3 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by N.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Fly Ash Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Fly Ash Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

N. Emission Unit S2.020 – Fly Ash Silo Operations – Silo Loading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.020 will not exceed 100.0 tons of fly ash per any one-hour period.
- b. **S2.020** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

Upon commencement of operations, *Permittee will*:

- (1) Monitor and record the loading rate of fly ash to **S2.020** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.020** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Fly Ash Silo Bin Vent Filter** while **System 14** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Fly Ash Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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O. Emission Unit PF1.012 - Fly Ash Silo Operations - Silo Unloading. UTM: North 4,091.244 km, East 746.997 km (Zone 11)

System 15 Fly Ash Silo Operations

PF1.012 Fly Ash Silo - Unloading

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.012** shall be controlled by best operational practices.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.012**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.012**, the following pollutants in excess of the following specified limits:

- (1) NAC 445B.305 The discharge of PM₁₀ to the atmosphere will not exceed **0.30** pound per hour or more than **1.31** tons per year. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by paragraph O.3.a. of this section.
- (2) NAC 445B.305 The discharge of PM to the atmosphere will not exceed **0.30** pound per hour or more than **1.31** tons per year. This limit is less than the **58.5** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by paragraph O.3.a. of this section.
- (3) NAC 445B.22017 The opacity from the **PF1.012** discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

O. Emission Unit PF1.012 – Fly Ash Silo Operations – Silo Unloading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable discharge rate for PF1.012 will not exceed 200.0 tons of fly ash per any one-hour period.
- b. **PF1.012** may operate **8,760** hours per calendar year.
- c. BACT Requirement Emissions from PF1.012 shall be controlled by best operational practices.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the discharge rate of fly ash for **PF1.012** on a daily basis.
- (1) Monitor and record the hours of operation of **PF1.012** on a daily basis.
- (2) Conduct and record a weekly visible emission inspection on **PF1.012** while **System 15** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Section V. Specific Operating Conditions (continued)

P. Emission Unit S2.021 - FGD By-product/Gypsum Silo Operations - Silo Loading.

UTM: North 4,091.243 km, East 746.954 km (Zone 11)

System 16 FGD By-product/Gypsum Silo Operations

S2.021 FGD By-product/Gypsum Silo - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.021** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **3,500** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 62.0 ft
Stack Diameter: 0.7 ft
Stack Velocity: 60.0
Stack Temperature: Ambient
Volume Flow Rate: 3,500 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of S2.021, the Permittee will not discharge or cause the discharge into the atmosphere from the exhaust stack of the FGD By-product/Gypsum Silo Bin Vent Filter - Loading, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.30** pound per hour, based on a 3-hour averaging period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by P.3.a of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.30** pound per hour, based on a 3-hour averaging period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by P.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the FGD By-product/Gypsum Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the FGD By-product/Gypsum Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

- P. Emission Unit S2.021 FGD By-product/Gypsum Silo Operations Silo Loading. (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.021 will not exceed 15.0 tons of gypsum per any one-hour period.
- b. **S2.021** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of gypsum to **S2.021** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.021** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the FGD By-product/Gypsum Silo Bin Vent Filter** while **System 16** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the FGD By-product/Gypsum Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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Q. Emission Unit PF1.013 - FGD By-product/Gypsum Silo Operations - Silo Unloading.

UTM: North 4,091.243 km, East 746.954 km (Zone 11)

System 17 FGD By-product/Gypsum Silo Operations

PF1.013 FGD By-product/Gypsum Silo - Unloading

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from PF1.013 shall be controlled by best operational practices.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.013**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.013**, the following pollutants in excess of the following specified limits:

- (1) NAC 445B.305 The discharge of PM₁₀ to the atmosphere will not exceed **0.30** pound per hour or more than **1.31** tons per year. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by paragraph Q.3.a. of this section.
- (2) NAC 445B.305 The discharge of PM to the atmosphere will not exceed **0.30** pound per hour or more than **1.31** tons per year. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by paragraph O.3.a. of this section.
- (3) NAC 445B.22017 The opacity from the **PF1.013** discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

O. Emission Unit PF1.013 – FGD By-product/Gypsum Silo Operations – Silo Unloading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable discharge rate for PF1.013 will not exceed 15.0 tons of gypsum per any one-hour period.
- b. **PF1.013** may operate **8,760** hours per calendar year.
- c. BACT Requirement Emissions from PF1.013 shall be controlled by best operational practices.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the discharge rate of gypsum for **PF1.013** on a daily basis.
- (1) Monitor and record the hours of operation of **PF1.013** on a daily basis.
- (2) Conduct and record a weekly visible emission inspection on **PF1.013** while **System 17** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Section V. Specific Operating Conditions (continued)

R. Emission Unit S2.022 - Quicklime Silos Operations - Silo #1 Loading. UTM: North 4,091.314 km, East 747.019 km (Zone 11)

System 18 Quicklime Silos Operations

S2.022 Quicklime Silo #1 - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.022** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **4,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 62.0 ft
Stack Diameter: 0.7 ft
Stack Velocity: 66.6
Stack Temperature: Ambient
Volume Flow Rate: 4,000 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of S2.022, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Quicklime Silo #1 Bin Vent Filter - Loading**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.34** pound per hour, based on a 3-hour averaging period. This limit is less than the **44.6** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by R.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.34 pound per hour, based on a 3-hour averaging period. This limit is less than the 44.6 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by R.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Quicklime Silo #1 Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Quicklime Silo #1 Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

R. Emission Unit S2.022 – Quicklime Silos Operations – Silo #1 Loading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.022 will not exceed 50.0 tons of quicklime per any one-hour period.
- b. **S2.022** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of quicklime to **S2.022** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.022** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Quicklime Silo #1 Bin Vent Filter** while **System 18** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Quicklime Silo #1 Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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S. Emission Unit PF1.014 - Quicklime Silos Operations - Silo #1 Unloading. UTM: North 4,091.228 km, East 747.019 km (Zone 11)

System 19 Quicklime Silos Operations

PF1.014 Quicklime Silo #1 - Unloading

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.014** shall be controlled by best operational practices.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.014**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.014**, the following pollutants in excess of the following specified limits:

- (1) NAC 445B.305 The discharge of PM₁₀ to the atmosphere will not exceed **0.34** pound per hour or more than **1.50** tons per year. This limit is less than the **19.17** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by paragraph S.3.a. of this section.
- (2) NAC 445B.305 The discharge of PM to the atmosphere will not exceed **0.34** pound per hour or more than **1.50** tons per year. This limit is less than the **19.17** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by paragraph S.3.a. of this section.
- (3) NAC 445B.22017 The opacity from the **PF1.014** discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

S. Emission Unit PF1.014 - Quicklime Silo Operations - Quicklime Silo #1 Unloading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable discharge rate for PF1.014 will not exceed 10.0 tons of gypsum per any one-hour period.
- b. **PF1.014** may operate **8,760** hours per calendar year.
- c. BACT Requirement Emissions from PF1.014 shall be controlled by best operational practices.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the discharge rate of quicklime for **PF1.014** on a daily basis.
- (1) Monitor and record the hours of operation of **PF1.014** on a daily basis.
- (2) Conduct and record a weekly visible emission inspection on **PF1.014** while **System 19** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Section V. Specific Operating Conditions (continued)

T. Emission Unit S2.023 - Quicklime Silos Operations - Silo #2 Loading. UTM: North 4,091.228 km, East 746.766 km (Zone 11)

System 20 Quicklime Silos Operations

S2.023 Quicklime Silo #2 - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.023** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **4,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 62.0 ft
Stack Diameter: 0.7 ft
Stack Velocity: 66.6
Stack Temperature: Ambient
Volume Flow Rate: 4,000 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of S2.023, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of the Quicklime Silo #2 Bin Vent Filter - Loading, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.34** pound per hour, based on a 3-hour averaging period. This limit is less than the **44.6** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by T.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.34 pound per hour, based on a 3-hour averaging period. This limit is less than the 44.6 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by T.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Quicklime Silo #2 Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the Quicklime Silo #2 Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

- T. Emission Unit S2.023 Quicklime Silos Operations Silo #2 Loading. (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.023 will not exceed 50.0 tons of quicklime per any one-hour period.
- b. **S2.023** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of quicklime to **S2.023** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.023** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Quicklime Silo #2 Bin Vent Filter** while **System 20** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Quicklime Silo #2 Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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U. Emission Unit PF1.015 - Quicklime Silos Operations - Silo #2 Unloading. UTM: North 4,091.228 km, East 746.766 km (Zone 11)

System 21 Quicklime Silos Operations

PF1.015 Quicklime Silo #2 - Unloading

1. NAC 445B.3405

Air Pollution Control Equipment

Emissions from **PF1.015** shall be controlled by best operational practices.

NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.015**, *the Permittee* will not discharge or cause the discharge into the atmosphere from **PF1.015**, the following pollutants in excess of the following specified limits:

- (1) NAC 445B.305 The discharge of PM₁₀ to the atmosphere will not exceed **0.34** pound per hour or more than **1.50** tons per year. This limit is less than the **19.17** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by paragraph U.3.a. of this section.
- (2) NAC 445B.305 The discharge of PM to the atmosphere will not exceed **0.34** pound per hour or more than **1.50** tons per year. This limit is less than the **19.17** pounds per hour maximum allowable emission limit as determined from SIP 445.732 and the maximum allowable throughput as limited by paragraph U.3.a. of this section.
- (3) NAC 445B.22017 The opacity from the **PF1.015** discharge will not equal or exceed 20% in accordance with NAC 445B.22017.



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Section V. Specific Operating Conditions (continued)

U. Emission Unit PF1.015 - Quicklime Silo Operations - Quicklime Silo #2 Unloading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable discharge rate for PF1.015 will not exceed 10.0 tons of gypsum per any one-hour period.
- b. **PF1.015** may operate **8,760** hours per calendar year.
- c. BACT Requirement Emissions from PF1.015 shall be controlled by best operational practices.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the discharge rate of quicklime for **PF1.015** on a daily basis.
- (1) Monitor and record the hours of operation of **PF1.015** on a daily basis.
- (2) Conduct and record a weekly visible emission inspection on **PF1.015** while **System 21** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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Section V. Specific Operating Conditions (continued)

V. Emission Unit S2.024 - Activated Carbon Silo Operations - Silo Loading. UTM: North 4,091.227 km, East 746.751 km (Zone 11)

System 22 Activated Carbon Silo Operations

S2.024 Activated Carbon Silo - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.024** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **4,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 62.0 ft
Stack Diameter: 0.7 ft
Stack Velocity: 66.6
Stack Temperature: Ambient
Volume Flow Rate: 4,000 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.024**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the Activated Carbon Silo Bin Vent Filter - Loading**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.34** pound per hour, based on a 3-hour averaging period. This limit is less than the **40.0** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by V.3.a of this section.
 - (2) NAC 445B.305 The discharge of PM_{10} (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed 0.34 pound per hour, based on a 3-hour averaging period. This limit is less than the 40.0 pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by V.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the Activated Carbon Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of PM₁₀ to the atmosphere from the exhaust stack of the Activated Carbon Silo Bin Vent Filter will not exceed 0.01 grain per dry standard cubic foot, based on a 3-hour averaging period.



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Section V. Specific Operating Conditions (continued)

- V. Emission Unit S2.024 Activated Carbon Silo Operations Silo Loading. (continued)
 - 3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.024 will not exceed 30.0 tons of activated carbon per any one-hour period.
- b. **S2.024** may operate **8,760** hours per calendar year.
- 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of activated carbon to **S2.024** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.024** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the Activated Carbon Silo Bin Vent Filter** while **System 22** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the Activated Carbon Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



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W. Emission Unit S2.025 - By-product/Waste Silo Operations - Silo Loading.

UTM: North 4,091.307 km, East 746.939 km (Zone 11)

System 23 By-product/Waste Silo Operations

S2.025 By-product/Waste Silo - Loading

1. NAC 445B.3405

Air Pollution Control Equipment

a. Emissions from **S2.025** shall be ducted to a control system consisting of a **Bin Vent Filter** with 100% capture and a maximum volume flow rate of **4,000** dry standard cubic feet per minute (dscfm). The volumetric flow rate may be determined by utilizing Method 2 - *Determination of Stack Gas Velocity and Volumetric Flow Rate* as referenced in 40 CFR Part 60, Appendix A.

Stack Height: 62.0 ft Stack Diameter: 0.7 ft

Stack Velocity:

Stack Temperature: Ambient Volume Flow Rate: 4,000 dscfm

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.025**, *the Permittee* will not discharge or cause the discharge into the atmosphere from the exhaust stack of **the By-product/Waste Silo Bin Vent Filter - Loading**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere will not exceed **0.34** pound per hour, based on a 3-hour averaging period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by W.3.a of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere will not exceed **0.34** pound per hour, based on a 3-hour averaging period. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by W.3.a of this section.
 - (3) NAC 445B.22017 The opacity from the exhaust stack of **the By-product/Waste Silo Bin Vent Filter** will not equal or exceed 20% in accordance with NAC 445B.22017.
 - (4) NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **PM**₁₀ to the atmosphere from the exhaust stack of **the By-product/Waste Silo Bin Vent Filter** will not exceed **0.01** grain per dry standard cubic foot, based on a 3-hour averaging period.



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OPERATING PERMIT TO CONSTRUCT

Issued to: TOQUOP ENERGY, LLC, as Permittee

Section V. Specific Operating Conditions (continued)

W. Emission Unit S2.028 – By-product/Waste Silo Operations – Silo Loading. (continued)

3. NAC 445B.3405

Operating Parameters

- a. Maximum allowable loading rate for \$2.028 will not exceed 15.0 tons of FGD By-product per any one-hour period.
- b. **S2.028** may operate **8,760** hours per calendar year.

4. NAC 445B.3405

a. Monitoring, Testing and Record keeping

- (1) Monitor and record the loading rate of FGD By-product for **S2.028** on a daily basis.
- (2) Monitor and record the hours of operation of **S2.028** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on the exhaust stack of **the By-product/Waste Silo Bin Vent Filter** while **System 23** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.
- 4) Conduct and record a Method 5 and Method 201 or 201A (or an equivalent method as approved by the Director) performance test for PM and PM₁₀ on the exhaust stack of **the By-product/Waste Silo Bin Vent Filter** consisting of three valid runs within 60 days, but no later than 180 days, from the date of initial startup. The Method 201 or 201A emissions tests must be conducted in accordance with 40 CFR Part 51, Appendix M, Method 201 or 201A. The Method 5 emissions test must be conducted in accordance with 40 CFR Part 60, Appendix A, Method 5.



BUREAU OF AIR POLLUTION CONTROL

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CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

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X. Emission Unit PF1.011 – By-product/Waste Silo Operations – Silo Unloading / discharge to Trucks.

UTM: North 4,091.307 km, East 746.939 km (Zone 11)

System 24 By-product/Waste Silo Operations

PF1.016 By-product/Waste Silo Operations – Silo Unloading / discharge to Trucks

1. NAC 445B.3405

Air Pollution Equipment

Emissions from PF1.016 shall be controlled by material conditioning or water sprays.

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **PF1.016**, Permittee will not discharge or cause the discharge into the atmosphere from **PF1.016**, the following pollutants in excess of the following specified limits:

- a. (1) NAC 445B.305 The discharge of **PM** (particulate matter) to the atmosphere from **PF1.016** will not exceed **0.09** pound per hour, or exceed **0.09** ton per year. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445.732 and the maximum allowable throughput as limited by X.3.a of this section.
 - (2) NAC 445B.305 The discharge of **PM**₁₀ (particulate matter less than 10 microns in diameter) to the atmosphere from **PF1.016** will not exceed **0.09** pound per hour, or exceed **0.09** ton per year. This limit is less than the **25.16** pounds per hour maximum allowable emission limit as determined from NAC 445B.22033 and the maximum allowable throughput as limited by X.3.a of this section.
 - (3) NAC 445B.22017 The opacity from **PF1.016** will not equal or exceed 20% in accordance with NAC 445B.22017.



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CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

- X. Emission Unit PF1.016 By-product/Waste Silo Operations Silo Unloading / discharge to Trucks. (continued)
 - 3. NAC 445B.3405
 - **Operating Parameters**
 - a. Maximum allowable discharge rate for **PF1.016** will not exceed **15.0** tons of FGD By-product per any one-hour period.
 - b. Maximum allowable annual discharge rate for **PF1.016** will not exceed **15,552** tons of FGD By-product per 12-month rolling period.
 - c. **PF1.016** may operate 8,760 hours per year.
 - d. BACT Requirement Emissions from PF1.016 shall be controlled by material conditioning or water sprays.
 - 4. NAC 445B.3405
 - a. Monitoring, Testing and Record keeping

- (1) Monitor and record the discharge rate of FGD By-product for **PF1.016** on a daily basis.
- (2) Monitor and record the hours of operation of **PF1.016** on a daily basis.
- (3) Conduct and record a weekly visible emission inspection on **PF1.016** while **System 24** is operating; record the time of the survey and indicate whether any visible emissions were observed. If any visible emissions are observed, conduct and record a Method 9 visible emissions test within 24 hours and perform any necessary corrective actions. The Method 9 visible emissions test will be conducted by a certified visible emissions reader in accordance with 40 CFR Part 60, Appendix A, Method 9.



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CLASS I AIR QUALITY
OPERATING PERMIT TO CONSTRUCT

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Section V. Specific Operating Conditions (continued)

Y. Emission Unit S2.026 - Fuel Storage Tank UTM: North 4,091.394 km, East 746.441 km (Zone 11)

System 25 Distillate Fuel Storage Tank

S2.026 1,060,000 Gallon Distillate Fuel Storage Tank

1. NAC 445B.3405

Air Pollution Control Equipment

S2.026 shall be controlled by a fixed roof and conservation vent valve(s).

S2.026 Tank Dimensions

Tank Height: 50.0 ft Tank Diameter: 70.0 ft

2. NAC 445B.3405

Emission Limits

On and after the date of startup of **S2.026**, the **Permittee** will not discharge or cause the discharge into the atmosphere from **S2.026**, the following pollutants in excess of the following specified limits:

- a. NAC 445B.305 The discharge of **VOC** to the atmosphere will not exceed **524.28** pounds per rolling 12-month averaging period.
- b. NAC 445B.305 <u>BACT Emission Limit</u> The discharge of **VOC** to the atmosphere will not exceed **524.28** pounds per rolling 12-month averaging period.
- c. NAC 445B.22017 The opacity from **S2.026** will not equal or exceed **20%**. The opacity must be determined as set forth in 445B.22017.1(a) or (b).
- 3. NAC 445B.3405

Operating Parameters

- a. **S2.026** may store distillate fuel only.
- b. The maximum throughput will not exceed: **5,300,000** gallons per rolling 12-month period.
- c. **S2.026** may operate **8,760** hours per year.
- 4. NAC 445B.3405
 - a. Monitoring, Record keeping and Compliance

Upon commencement of operations, *the Permittee* will monitor and record in a contemporaneous log, the total distillate fuel throughput for **S2.026** on a monthly basis and calculate the rolling 12-month total.

*********End of Specific Operating Conditions********



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Facility ID No. A0381

DRAFT PERMIT NO. AP4911-1146

CLASS I AIR QUALITY OPERATING PERMIT TO CONSTRUCT

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Section VI. Emission Caps

A. No Emission Caps Defined.

**********End of Emission Caps*********



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CLASS I AIR QUALITY
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Section VII. Surface Area Disturbance Conditions

A. NAC 445B.22037

Fugitive Dust

- 1. *The Permittee* may not cause or permit the handling, transporting, or storing of any material in a manner that allows or may allow controllable particulate matter to become airborne.
- 2. Except as otherwise provided in subsection 4, *the Permittee* may not cause or permit the construction, repair, demolition, or use of unpaved or untreated areas without first putting into effect an ongoing program using the best practical methods to prevent particulate matter from becoming airborne. As used in this subsection, "best practical methods" includes, but is not limited to, paving, chemical stabilization, watering, phased construction, and re-vegetation.
- 3. Except as provided in subsection 4, *the Permittee* may not disturb or cover 5 acres or more of land or its topsoil until *the Permittee* has obtained an Operating Permit for surface area disturbance to clear, excavate, or level the land or to deposit any foreign material to fill or cover the land.
- 4. The provisions of subsections 2 and 3 do not apply to:
 - a. Agricultural activities occurring on agricultural land; or
 - b. Surface disturbances authorized by a permit issued pursuant to NRS 519A.180 which occur on land which is not less than 5 acres or more than 20 acres.

B. NAC 445B.305 Federally Enforceable PSD Permit BACT Requirement

Fugitive Dust Air Pollution Control Equipment

- 1. The Permittee shall install and continuously operate and maintain the following air pollution controls:
 - a. Facility Roads With the exception of roads at the solid waste disposal facility, all facility roads shall be paved and controlled with water sprays and/or sweeping. Roads at the solid waste disposal facility shall be controlled with gravel and/or chemical suppressants.
 - b. <u>Active Coal Storage Piles</u> All active coal storage piles shall be controlled with water sprays.
 - c. <u>Inactive Coal Storage Piles</u> All inactive coal storage piles shall be controlled by surface sealants (crusting agents).
 - d. Emergency Coal Storage Pile The emergency coal storage pile shall be controlled by water sprays.
 - e. Solid Waste Disposal Facility Inactive areas of the on-site solid waste disposal facility shall be controlled by surface sealants (crusting agents). Active areas of the on-site solid waste disposal facility shall be controlled by water sprays.

*********End of Surface Area Disturbance Conditions *********



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Section VIII. Amendments

NA

This Permit to construct:

1. Is non-transferable. (NAC 445B.287)

Phone:

- 2. Will be posted conspicuously at or near the stationary source. (NAC 445B.318)
- 3. Will expire if construction is not commenced within 18 months after the date of issuance or if construction of the facility is delayed for 18 months after initiated. (NAC 445B.3366)
- 4. Will expire if a complete application for a Class I operating permit or modification of an existing Class I operating permit is not submitted within 12 months after the initial start-up. (NAC 445B.3366)
- 5. Any party aggrieved by the Department's decision to issue this permit may appeal to:

(775) 687-9349

- a) The State Environmental Commission (SEC) within ten days after the date of notice of the Department's action. (NRS 445B.340)
- b) The United States Environmental Protection Agency's Environmental Appeals Board (EAB). The provisions in 40 CFR 124.19 shall apply to appeals made to the EAB for this PSD Operating Permit to Construct.
- 6. The Permittee shall submit a complete Class I application within 12 months after the notification date of commencement of operation as required in this permit to construct. (NAC 445B.3361)
- 7. The effective date of the permit is 30 days after service of notice to the applicant and commenters of the final decision to issue, modify, or revoke and reissue the permit, unless review is requested on the permit under 40 CFR 124.19 within the 30 day period.
- 8. If an appeal is made to the EAB, the effective date of the permit is suspended until such time as the appeal is resolved.

Signature		
Issued by:	Greg A. Remer, Chief Bureau of Air Pollution Control	

VIII-1

Date:

PROPOSED

Class I Non-Permit Equipment List

Appended to Toquop Energy, LLC, #AP4911-1146

Emission Unit #	Emission Unit Description
7.1.001	
IA1.001	4,000 Gallon Distillate Fuel Storage Tank, NAC 445B.288(2)(d)
IA1.002	1,000 Gallon Gasoline Storage Tank, NAC 445B.288(2)(d)
IA1.003	300 Gallon Distillate Fuel Storage Tank, NAC 445B.288(2)(d)
IA1.004	14,000 Gallon Lube Oil Storage Tank, NAC 445B.288(2)(d)
IA1.005	Two, 3,000 Gallon Lube Oil Storage Tanks, NAC 445B.288(2)(d)
IA1.006	1,000 Gallon Used Oil Storage Tank, NAC 445B.288(2)(d)